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Inspiration: Examining Its Emotional Correlates and Relationship to Internalized Values

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INSPIRATION:
EXAMINING ITS EMOTIONAL CORRELATES AND RELATIONSHIP TO
INTERNALIZED VALUES

A dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at Virginia Commonwealth University

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Abstract

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By David J. Jennings II, M.S., M.A.

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The study of inspiration as a psychological construct has received little empirical attention to date. In the present dissertation, I review the empirical literature on inspiration and present a theoretical model and definition of inspiration. In two studies, I tested a Value-Congruent Model of Inspiration and my proposed definition. In Study 1 ($N = 134$), I explored inspiration's emotional correlates and tested whether individuals experience greater inspiration if the inspirational content is concordant with individual meaning and values. As predicted, state inspiration was positively related to state levels of admiration, awe, and elevation, and value-congruent stimuli significantly predicted self-reported experiences of inspiration. In Study 2 ($N = 173$), I replicated these results and tested whether value-congruent inspiration would predict behavioral intentions and volunteering behavior toward environmental preservation. The adapted measure of self-concordance for internalized values did not yield the predicted results. However, one's

level of commitment to the environment predicted willingness to sacrifice for the environment, which was partially mediated by state inspiration.

Inspiration: Examining Its Emotional Correlates and Relationship to Internalized Values

For much of its history, psychology has focused on the problems of humanity, seeking to find answers and solutions to mental health disorders and other ailments that plague society. However, the field of positive psychology emerged in recent years and has assumed the task of identifying the constructs and strengths of people that promote positive well-being and flourishing (Seligman, 1998). Many researchers have now begun to focus their attention on the positive aspects of humanity by studying positive emotions, prosocial behavior, virtues such as forgiveness and humility, and constructs that promote optimal development and health (Batson & Shaw, 1991; Davis, Worthington, & Hook, 2010; Fredrickson, 1998; McCullough, Emmons, & Tsang, 2002; Worthington, 2005). Much of the research on these constructs remains in nascent stages, and we are just beginning to understand their processes and influences on human behavior and relationships.

The study of inspiration is one construct that has received little empirical attention to date from a psychological perspective. Inspiration is associated with positive affect and has been shown to enhance well-being and mediate the transmission of creative ideas (Thrash & Elliott, 2003; Thrash, Elliot, Maruskin, & Cassidy, 2010; Thrash, Maruskin, Cassidy, Fryer, & Ryan, 2010). However, we know virtually nothing about the process that leads people to act or not to act when they have felt inspired. It is presumed that what leads one to experience inspiration is at least somewhat dependent on individual characteristics and experiences, and inspiration can come from both intrapsychic and external sources across a variety of domains (Thrash & Elliot, 2003). Thus, what one individual finds inspirational may not be inspirational to another. Likewise, having felt inspired, different individuals will act in different ways if at all. Someone who is gifted in writing may write a poem or a story. Someone who is artistic may paint a

landscape. Others, depending on the type of inspirational material, may set goals for personal changes that promote self-growth or that promote the well-being of other people, animals, or the environment. Still, some may simply soak-in the moment when experiencing inspiration, and the inspirational experience may not manifest into any tangible form. These issues raise several questions. Can we label an experience as inspirational if it doesn't lead to tangible expression (e.g. is inspiration motivational)? Is the experience of inspiration merely positive feelings? Often people talk of having "felt" inspired, but is inspiration a distinct emotion? If not, what are the feelings associated with inspiration? Why do some people feel compelled to create having felt inspired, while others may go out to save the world?

The present dissertation seeks to shed light on some of these questions from a theoretical and empirical perspective. In Chapter 2, I review the literature on inspiration as a psychological construct, highlighting unanswered questions within current research, which inform my own empirical studies. In Chapter 3, I present a conceptualization for understanding inspiration within the literature of positive emotions and positive motivation. Based on this conceptualization, I provide a theoretically grounded and empirically testable definition of inspiration based on concepts of self-determination theory (SDT), positive emotions, and existing research. Chapter 4 includes a general statement of the problem and two studies that examine the nature of inspiration and test my hypotheses. The first study explores inspiration's correlates and associated emotions, and it tests whether individuals experience greater inspiration if the inspirational content is concordant with individual meaning and values. The second study tests whether value-congruent inspiration predicts behavioral intentions and volunteering behavior.

Review of the Literature

Talk to anyone who has created something of importance, championed social causes, or is exemplary of great achievement, and at some point in the conversation you are likely to hear the term inspired. People often say they “felt” inspired to do noble acts, achieve greatness, or create a work of art, or they credit something in particular as having “inspired” them in the process. However it may be expressed, inspiration is frequently cited as a source for some of the most significant works and achievements throughout history. But what do we really know about inspiration from a psychological standpoint? Anecdotally, it seems that most people report experiencing it at various times in their lives. Sometimes it leads to significant changes in oneself; at other times it may lead to new creations or new directions in one’s life, work, or relationships. As often as it is cited as a poignant experience within personal, social, and creative realms, inspiration should be a topic of much psychological interest. However, empirical study on inspiration is quite sparse. The present review focuses on the psychological literature regarding inspiration. First, I review early writings on its nature and theorized origin. Next, I review the empirical literature on inspiration and critique these studies. Finally, I discuss the steps needed to advance the study of inspiration as a distinct construct given the current state of the literature.

Historical Theorizing of Inspiration

Early psychological inquiry on the nature of inspiration explained the construct from a psychoanalytic perspective. Knowlson (1922) characterized inspiration as a positive synthesis of unconscious thoughts and ideas that is marked by intense emotion. Likewise, Kris (1939) viewed inspiration as something that originated in the unconscious. He compared it to a state of ecstasy with one fundamental difference: “In ecstasy the process results in an emotional climax

only, in states of inspiration it leads to active elaboration in creation” (p. 389). Other characteristics noted of inspiration were that it often is received unexpectedly and passively rather than through effortful and active intention, that it often moves the recipient to transcend normal preoccupations and everyday concerns, and that inspiration entails the need to create or communicate the inspired material to others in some tangible form (Council, 1988; Greenacre, 1964; Hymer, 1990; Kris, 1939; Leuba, 1924).

These early psychological investigations of inspiration’s nature were largely conjectural and anecdotal. Empirical investigation of the construct remained largely absent until recently. One explanation for the lack of empirical study into the nature of inspiration could be psychology’s preoccupation with ailments for most of its history. In addition, the source of inspiration has historically been attributed to a divine or supernatural being (i.e., God, the Muses), and its celestial roots may have frightened away those in the business of conducting empirical science. In his review of *The Soul of a Christian: A Study in the Religious Experiences*, Patton (1901) asserted that ordinary psychological methods were inadequate for addressing things such as religious emotions, inspiration, and poetic invention, and that such things fall “rather within the sphere of the metaphysician than of the psychologist” (p. 196). Another possibility may be the difficulty of establishing inspiration as a distinct construct when it is experienced in such a variety of ways and manifests across a variety of domains (i.e., the arts, personal growth, achievement and success, prosocial behavior).

However, in recent years, the field of positive psychology has begun empirically studying virtues, character strengths, religion/spirituality, and other constructs that promote individual well-being and contribute to the flourishing of humanity and society (see Snyder & Lopez, 2009 for a review). Psychological methodology, statistics, and research design have also advanced,

allowing us to more accurately assess and study phenomenological experiences such as inspiration that previously eluded empirical investigation (see Ong & van Dulmen, 2007). Despite these advances, the study of inspiration remains nascent, and many questions regarding its nature and how, or even why, it is experienced remain unanswered.

Method of Review

On June 2, 2011 I searched the database *PsychINFO*, (*Psychological Abstracts*), with the key word inspiration specified in the article title. This search produced 228 results, many of which were unrelated to inspiration as a psychological construct or were not empirical studies. I further refined the search by limiting the methodology of results to empirical studies only, which produced 58 results. I read the abstracts of these results for relevance. Many of the articles had inspiration in the title, but were not concerned with studying inspiration itself. Many of the articles examined specific sources of inspiration or its role as secondary to some other area of interest. In these articles, inspiration as a distinct construct was not examined or measured. Finally, some articles concerned inspiration in its physiological sense (e.g., related to breathing) or in a strictly creative domain. I selected only those articles that examined inspiration as a distinct psychological construct, and in which the construct of inspiration was the focus of empirical investigation through the gathering of either qualitative or quantitative data. A total of ten studies met inclusion criteria for this review as of June 2, 2011. Five of these studies were published articles in peer-reviewed journals, four were dissertations (two of which became published articles included in the previous number), and one was a chapter in an edited book. I review all of the qualitative and quantitative studies of inspiration and provide a critique; however the focus of this review will be on the experimental studies of inspiration because they are the most relevant for the purpose of this dissertation.

The first study to employ a psychological research design to investigate the nature of inspiration and its role in healthy functioning was qualitative (Hart, 1993, 1998). Hart (1998) conducted in depth interviews of 70 participants to explore some of inspiration's core characteristics and components. He identified four phenomenological characteristics based on his examination of the data: (a) connection, which involved moving from a sense of self separateness to a greater sense of connectedness with the self, others, nature, an idea, or some aspect of the divine; (b) openness, an availability and receptivity accompanied by a sense of being filled; (c) clarity, which might involve either a heightened sensory awareness, greater understanding, or both; and (d) energy, which involved a powerful shift in mood and level of arousal. Regarding the last characteristic, Hart noted that energy could at times be manifested in immediate action, while at other times it may be the impetus to "direct one's energies in a particular direction" (p. 20). However, Hart was careful to distinguish inspiration from motivation and pointed out that it does not always result in a tangible form of expression (i.e., a work of art). Hart went on to discuss how inspiration might be cultivated, recognizing that it cannot necessarily be willed and that the salience of potentially inspiring content will vary according to individual meaning structures and experience.

Hart's (1998) qualitative study importantly described inspiration to be a distinct phenomenological event that is experienced by many people and is not just reserved for the gifted artist, poet, or mystic. Additionally, the study presented a potential rationale for the importance of studying inspiration. When asked to describe a life lacking inspiration, participants used words such as depression, meaninglessness, hopelessness, numbness, lifelessness, isolation, and boring. Thus, the experience of inspiration may have important implications for well-being and healthy functioning.

Although the above study gives us a more in-depth understanding of inspiration than that of casual observation, the qualitative design does not permit us to test conclusions. Moreover, based on qualitative analysis of the data, Hart (1998) defined inspiration as “a specific epistemic process that provides psychological and spiritual sustenance and is characterized by a remembrance or recognition of some knowledge or perspective valuable in the social or psychological context given” (p. 32), a definition that hardly lends itself to empirical investigation. Hart ultimately compares inspiration to a type of knowing similar to that of mysticism or the shamanic journey. While his description of its characteristics offered some promise for future study, his description and comparison of inspiration to mystical experience catapult it back into the domain of the metaphysician. This comparison and description of the experience fails to bring inspiration down from the unknowable celestial world and into the everyday experience of ordinary people where it can be studied and understood. Finally, his study does not provide a context for understanding and studying inspiration based on existing psychological theory.

Two of the studies that attempted to investigate the nature of inspiration quantitatively were dissertations (Degaard, 2005; Fulmer, 2007). Degaard (2005) created a measure of inspiration, the Inspiration Questionnaire (InQ), based on a conceptualization that inspiration is composed of three components: (a) its *source*, which lies in depressive states; (b) its *energy*, or that which motivated the inspiration process; and (c) the *function* of that process. From this conceptualization, rooted in psychoanalytic theory, Degaard created a self-report scale of 65 items consisting of the Depressive, Motivation, and Reparation subscales. Degaard reported an initial pool of 80 items were pilot tested with 8 participants, which led to a revised 75-item questionnaire. This was then administered to 5 more participants, eventually leading to a 65-

item measure. There is no mention of factor analysis in the winnowing process or the determination of the measure's three factors, nor is there mention of its psychometric properties. Degaard provides construct validity data for the final 65-item scale on a group of 46 subjects by correlating its subscales with the Beck Depression Inventory-II (BDI-II) and the Millon Clinical Multiaxial Inventory-III (MCMI-III). Findings were only somewhat consistent with hypothesized directions. Degaard's study has multiple problems from an empirical and theoretical standpoint. The conceptualization of inspiration is theoretically and empirically unsubstantiated, and the methodology for creating and validating a psychometric instrument is weak relative to current standards. Due to these issues, findings on the InQ are dubious at best, and the study did not advance the scientific understanding or measurement of inspiration as a result.

Fulmer (2007) conducted a single study in which participants ($N = 145$) completed measures for trait inspiration (Inspiration Scale; Thrash & Elliott, 2003), temperament (Keirsey Temperament Sorter II; Keirsey, 1998), and positive affect (Positive and Negative Affect Schedule; Watson, Clark, & Tellegen, 1998). The study was correlational, and no experimental manipulation was conducted. Fulmer examined the variables for relationships, finding support for only one of his hypotheses – inspiration was positively related to positive affect. Inspiration was unrelated to any of the four temperament types examined. Fulmer's use of temperament and the temperament measure itself are theoretically and psychometrically weak, respectively, so this result was not surprising. Additionally, the finding that trait inspiration was positively related to positive affect had already been established (Thrash & Elliot, 2003). While this study replicated inspiration's relationship with positive affect, it did nothing to advance our understanding of the construct.

Experimental Studies of Inspiration

The most informative, and only, experimental studies to date to focus solely on inspiration as a distinct construct are few in number and conducted by the same first author (Thrash, 2003; Thrash & Elliott, 2003; Thrash & Elliott, 2004; Thrash, 2007; Thrash et al., 2010a; Thrash et al. 2010b). Thrash (2003) is a dissertation that was eventually published as Thrash and Elliott (2004) in a peer-reviewed journal, so I concentrated my review on the four published articles and one chapter in an edited book.

Thrash and Elliott's (2003) seminal paper on inspiration as a psychological construct conceptualize inspiration as a motivational state defined by three characteristics: (a) *motivation*, which involves the energization or direction of behavior; (b) *evocation*, meaning the experience of inspiration is not initiated by an act of the will but is evoked; and (c) *transcendence*, meaning inspiration directs one's attention above usual concerns and towards better possibilities. Thrash and Elliott hypothesize that inspiration varies within and between persons, so it is conceptualized as both a state and trait construct. They used a phenomenon-based approach to their study of inspiration drawing upon diverse theoretical perspectives, which allowed for a conceptualization that could encompass the multitude of content domains that inspiration tends to span (i.e., creative, spiritual, interpersonal).

In a series of four programmatic studies, Thrash and Elliot (2003) designed and tested the validity of a trait measure of inspiration. Results showed the Inspiration Scale (IS) consisted of two internally consistent 4-item factors, labeled as intensity and frequency subscales. Cronbach's alphas ranged from .90 to .95, for the overall index, .90 to .93 for the frequency subscale, and .89 to .92 for the intensity subscale. Trait inspiration related to several constructs and personality variables in hypothesized directions. The IS correlated positively with the

behavioral activation system (BAS), intrinsic motivation, positive affect, positive emotionality, perceived competence, self-esteem, optimism, self-determination, and two Big Five personality traits (i.e., Openness to Experience and Extraversion). Evidence for convergent validity was adduced by comparing participant IS responses to participant responses using a definition of inspiration from the Oxford English Dictionary. The same rating scale for frequency and intensity items were used, and the two measures showed strong correlations for both subscales (.59 and .50 respectively). Construct validity was evidenced by showing US patent holders were inspired more frequently and intensely than a comparison group. Inspiration experienced at a state level was evidenced by intraindividual variation using experience sampling methodology.

In a subsequent set of three studies, Thrash and Elliott (2004) provided further evidence for their tripartite (motivation, evocation, transcendence) conceptualization of inspiration by demonstrating these characteristics extended to discrete states of inspiration. In the first experiment, participants completed measures of activated positive and negative affect, task involvement, spirituality, meaning, and volitional control in both a baseline and inspiration condition, which were given one week apart. In the inspiration condition, participants completed measures after recalling and writing about an experience of inspiration. In the baseline condition, participants completed measures after writing about an experience they typically have on a daily basis. The motivation aspect of inspiration was operationalized as activated PA and task involvement. *Activated PA* is defined as an affective state or mood characterized by positive valence and high activation and is typically measured using the PANAS (Watson et al., 1998; Watson, Wiese, Vaidya, & Tellegen, 1999). The evocation aspect of inspiration was operationalized as low volitional control (i.e., responsibility), and the transcendence aspect of inspiration was operationalized as spirituality and meaning. As hypothesized, inspiration was

associated with higher activated PA, lower activated NA, and greater spirituality and meaning. Inspiration was not related to a self-report measure of volitional control, but was found to relate positively to an indirect measure of responsibility through rater coded linguistic representations of the self and other in the participant narratives.

In Study 2, Thrash and Elliot (2004) used the same procedure as Study 1, but they replaced the baseline condition with an activated PA condition. Because inspiration was strongly correlated with activated PA, it was important to establish discriminant validity by distinguishing it from activated PA. In the activated PA condition, activated PA was defined for participants by the four items on the PANAS that load strongest on this factor – enthusiastic, interested, determined, and excited. Participants were told to write about such an experience. The same dependent measures that were used in Study 1 were used in the second study, with the addition of motivation-relevant measures for interest, motivation strength, and goal clarity. Inspiration was shown to be distinct from activated positive affect, its strongest correlate in Study 1, by involving greater transcendence, comparable approach motivation, and less self-reported volitional control. Thrash and Elliot showed additional evidence in Study 2 that inspiration can be broken into two component processes. Being *inspired by* which involves an “appreciation of and accommodation to an evocative object,” and being *inspired to* which involves the “motivation to extend the qualities exemplified in the evocative object” (p. 958). In Study 3, Thrash and Elliot showed the two processes were uniquely related to inspiration’s core components. Being inspired “by” was positively related to transcendence and negatively related to responsibility, whereas being inspired “to” was negatively related to transcendence and positively related to responsibility and motivation.

In another study, Thrash (2007) used data collected from Thrash and Elliot (2004, Study 3) to provide additional evidence for the discriminant validity of inspiration from activated PA. Thrash hypothesized inspiration and activated PA would be distributed differentially across weekdays and the weekend. Results showed that inspiration was significantly more present on weekdays than on weekends, whereas activated PA did not show significant differences between these two time measures.

Thrash et al. (2010a) conducted four studies to examine inspiration's effects on well-being. In Study 1 participants were randomly assigned to a condition of extraordinary competence (i.e., watching a Michael Jordan video) or to a control condition (i.e., watching a computer screen saver of abstract shapes). State measures of inspiration and affect were taken after watching the video clips. Positive affect (PA) was conceptualized as an affective component of positive well-being. Results showed that participants in the Jordan condition experienced increased positive affect, which was fully mediated by increased inspiration. In Study 2, Thrash et al. used a longitudinal, cross-lagged design and added additional measures of well-being. Inspiration was predicted to increase all positive well-being variables even after controlling for social desirability, Time 1 well-being measures, and personality variables. Results showed that trait inspiration uniquely predicted PA, life satisfaction, self-actualization, vitality, and subjective well-being. Additionally, in Study 3, Thrash et al. showed that trait inspiration was a common antecedent of the well-being variables PA, life satisfaction, vitality, and self-actualization by predicting the latent variable accounting for the shared variance of these constructs. Finally, in Study 4, Thrash et al. extended the findings of Studies 1-3 by showing inspiration's effects on well-being were consistent at a within-persons level. Participants reported the level of inspiration experienced the first half of the day across a two-week period

and the levels of well-being variables in the evening. Results showed that level of inspiration at midday predicted level of well-being in the evening. Gratitude and purpose in life were partial mediators of this effect.

The final empirical study in the present review examined inspiration's role in the actualization of creative ideas (Thrash et al., 2010b). In Study 1, participants completed online questionnaires weekly for four weeks concerning their experiences of creative ideas and inspiration. Confirmatory factor analysis showed that having or experiencing creative ideas and being inspired were factorially distinct. A cross-lagged analysis showed that experiencing inspiration was preceded by getting the creative ideas. In Study 2, Thrash et al. sought to extend the tripartite conceptualization to a specific domain (creative writing). Participants wrote a four-page APA style paper on a topic of their choosing and completed measures for inspiration and effort. Papers were rated by judges for APA style, clarity, conciseness, creativity of content, creativity of style, grammar, insightfulness, literature support, novelty, and organization. Additionally, each judge rated his or her opinion of the writers' levels of inspiration and effort. Results showed that inspiration and effort were positively related but also distinct. Individuals with higher inspiration scores created papers with higher creativity scores both from the judges' ratings and attributions of creativity, while technical merit was attributed to effort. In Study 3, Thrash et al. aimed to show that inspiration was also factorially distinct from awe and PA and to extend inspiration's predictive utility beyond these variables. Participants wrote a poem and completed measures for evocation, inspiration, effort, PA, awe, and their own appraisals of the creativity of their idea for the poem. Judges rated the poems on 19 evaluative dimensions. CFA results showed evidence of convergent and discriminant validity for inspiration, effort, awe, and PA. The four process variables had unique predictive validity, with inspiration positively

predicting creativity but not effort, awe, or positive affect. Additionally, structure equation modeling was used to show that the creativity of the idea predicted effort, inspiration, awe, and PA, but only the path from inspiration to creativity of the product was significant. This provided evidence that the transmission of a creative idea to a creative product is uniquely mediated by inspiration. In Study 4, Thrash et al. used the same procedure as they did in Study 3 and extended its findings to the domain of fiction writing. Additionally, in Study 4, they found that openness to aesthetics and PA predicted creativity of the idea, and creativity of the idea predicted inspiration only for individuals high in BAS drive (behavioral activation system). Based on these findings, Thrash et al. concluded that the transmission of creative ideas to a tangible product is the result of a stronger motivation than personal initiative and effort (i.e., presumably inspiration), and without inspiration, such ideas might never materialize.

Strengths and Limitations of Experimental Studies on Inspiration

The experimental studies herein described significantly advanced a conceptualization of inspiration that captures some of its unique characteristics and establishes it as a distinct construct in its own right worthy of studying (Thrash, 2003; Thrash & Elliott, 2003; Thrash & Elliott, 2004; Thrash, 2007; Thrash et al., 2010a; Thrash et al. 2010b). The tripartite conceptualization of inspiration is consistent with historical theorizing and qualitative data, and several of the studies' results supported this conceptualization. The methodologies of the studies, hypothesized results, and statistical analyses were appropriate, as well as impressive, and likely underwent intense peer scrutiny given that all four articles were published in the *Journal of Personality and Social Psychology*. Importantly, the reviewed studies showed inspiration's relationship to several related constructs (i.e., BAS, intrinsic motivation, positive affect, positive emotionality, perceived competence, self-esteem, optimism, self-determination, and the Big Five

personality traits Openness to Experience and Extraversion), but also provided evidence of discriminant validity from others (i.e., activated PA, awe, effort). The reviewed studies also provided evidence for the importance of studying inspiration by showing its effect on well-being and the transmission of creative ideas.

The studies conducted by the Thrash research camp created a solid foundation for advancing the study of inspiration. Nevertheless, there are several important issues that need to be addressed if research on inspiration is to advance.

First, Thrash and Elliot (2003) discuss how the various manifestations of inspiration across multiple domains have led to theoretical fragmentation regarding its conceptualization. However, although they use motivational systems (i.e., approach/avoidance motivation) to inform some of their hypotheses regarding inspiration, nowhere do they present a unifying theory for understanding the construct. In all of these studies, we have a better understanding of the “what” of inspiration (i.e., characteristics, processes, antecedents, effects), but we still know very little of the “why.” Lingered questions remain. Why do we experience inspiration? Why does the same content inspire some people to action but not others? Why are people uniquely inspired to act in different ways across various domains (i.e., creative, spiritual, interpersonal)? Why, having felt inspired, do people at times transform the experience of inspiration into a tangible product or form, whereas at other times the experience fails to produce a tangible product or form? A unifying theory is needed to contextualize the construct of inspiration across its many domains that accounts for its influence on behavior and provides the basis for further study.

Second, inspiration often entails a salient experience of emotion, but the experimental studies on inspiration have not established its emotional correlates other than positive affect and possibly the feeling of awe, to which inspiration is related but not the same thing (Thrash &

Elliot, 2004; Thrash et al., 2010b). Researchers have hinted of inspiration's relationship to self-transcendent emotions such as elevation, admiration, and awe (Algoe & Haidt, 2009; Haidt & Morris, 2009; Landis et al., 2009; Thrash & Elliot, 2003), but the relationship between these constructs and their distinction from one another remains an empirical question. Keltner and Haidt (2003) discuss various awe-related states in response to threat, beauty, ability, virtue, and supernatural causality, and distinguish awe from admiration of ability, and from elevation, which results from witnessing the virtuous acts of others. However, all three feeling states share some similarities. I presume that inspiration can involve any one of these emotions, but this has not been empirically tested. For example, I might witness a highly virtuous and moral act, view someone do something of extraordinary skill, or feel highly moved by the sun setting over the Grand Canyon. In each case, I will likely feel some variant of elevation, admiration, or awe, respectively, but I might walk away from all three experiences saying, "I felt inspired." Thrash et al. (2010a) included a Michael Jordan condition, but there was no measure for admiration or awe in that study. It is important to understand what emotions are key in which situations that increase one's level of inspiration. In order for the study of inspiration to advance, its emotional correlates need to be established, and it must be meaningfully distinguished from these related states as well. Or, if inspiration consists of mixtures of awe, elevation, and admiration, then we must determine what makes it unique from these emotions.

Third, Thrash and Elliot (2003, 2004) conceptualize inspiration as an appetitive motivational state defined by the three components of evocation, transcendence, and motivation. While this definition is broad enough to capture its commonalities across different content domains and manifestations, it is too narrow to capture other important aspects of inspiration that might meaningfully distinguish it from its related constructs. Elevation and admiration are

considered to have an element of transcendence (Haidt & Morris, 2009), and awe is considered to have an aspect of passive receptivity (Haidt & Keltner, 2001) similar to inspiration's characteristic evocation. Thus, while inspiration may contain these elements, this may not be enough to distinguish it as a separate construct. A definition of inspiration that is theoretically grounded and that accounts for its emotional components is needed. Furthermore, the definition must be empirically testable to further validate inspiration as a distinct construct.

Conclusion

Despite the role inspiration may have in motivating behavior across multiple domains that results in great personal, prosocial, and creative achievements, it has been largely ignored in psychological literature as a distinct construct. Inspiration has important implications for individual well-being (Thrash et al., 2010a) and the transmission of creative ideas (Thrash et al., 2010b), and it may play an important role in the therapeutic process as well as scientific discovery (O'Grady, 2008; O'Grady & Richards, 2010). Moreover, with its potential relation to self-transcendent emotions, it may have important implications for prosocial behavior and society. Haidt, Seder, and Kesebir (2008) proposed the hive hypothesis, speculating "the most effective moral communities (from a well-being perspective) are those that offer occasional experiences in which self-consciousness is greatly reduced and one feels merged with or part of something greater than the self" (p. 136). Inspiration may indeed be such an experience similar to "peak experiences" (Maslow, 1964) and instances of "quantum change" (i.e., discontinuous positive change; Miller and C'de Baca, 2001), which help people and societies to flourish. Haidt (2003a) suggests that examining peak experiences and moral transformations is necessary if positive psychology is to bring about a balanced reappraisal of human nature. Inspiration's potential role in such experiences, its role in individual well-being, and its contribution to human

flourishing, should make it an extremely relevant construct to be studied in the field of positive psychology toward accomplishing this goal.

The studies of inspiration in the present review are just beginning to shed light on its nature and its mechanisms. Importantly, experimental studies have helped to remove it from a nebulous, ethereal experience to a distinct construct capable of being scientifically investigated. These studies have established some of inspiration's core characteristics, antecedents, processes, and correlates (Thrash & Elliot, 2003, 2004); however, the current state of scientific investigation leaves many questions unanswered. In order to advance the study of inspiration, three suggestions are proposed: (a) inspiration needs to be contextualized within a unifying, theoretical framework from which theoretically grounded hypotheses can be generated for future studies; (b) its emotional correlates need to be empirically investigated, and it must be meaningfully distinguished from emotions that involve similar characteristics (i.e., elevation, admiration, awe); and (c) a theoretically grounded definition of inspiration that accounts for its emotional component needs to be established and empirically tested to further validate its unique influence on human motivation and behavior. The following chapter presents a theoretical framework for studying inspiration and a testable definition toward these ends.

Theoretical Framework for Studying Inspiration

At the heart of understanding the construct of inspiration is its motivational and emotional properties. Theories of motivation have been debated for decades. Drive-reduction theories maintain human behavior is motivated to meet basic biological needs (Hull, 1943). Others have added to this the need of optimal states of motivational arousal (Brehm & Self; 1989) and the role of causal attributions (Weiner, 1985) in motivating behavior. More recently, researchers have begun focusing on approach-avoidance models of motivation (Elliot, 1999; Elliot & Church, 1997) and the role emotions play in motivating behavior through specific action tendencies (Fredrickson, 1998; Frijda, 1986; Levenson, 1994). Many models of emotion have focused on the adaptive role that emotions such as fear and anger play in motivating specific actions in life-threatening situations (Tooby & Cosmides, 1990). Less attention has been given to positive emotions. Fredrickson's (1998) broaden-and-build model of positive emotions opened the door for the scientific investigation of the role and effects that positive emotions have regarding human behavior. Several positive emotions such as happiness (Diener, 2008), gratitude (McCullough et al., 2002), awe (Keltner & Haidt, 2003), elevation (Haidt, 2000), and admiration (Algoe & Haidt, 2009) are now being investigated for their contribution to individual well-being, prosocial behavior, and morality. Thrash and Elliot (2003) conceptualized inspiration as a motivational state that may have potentially relevant self-transcending emotions (i.e., elevation, awe, admiration). Given its motivational and affective nature, I will discuss relevant theories of each for understanding inspiration, and then I will present a framework and definition for studying inspiration that integrates both.

Inspiration and Emotion

Unlike negative emotions, which evoke specific action tendencies, positive emotions are theorized to broaden thought-action repertoires, which help to build durable personal resources for future use (Fredrickson, 1998). Because positive emotions are thought to broaden the scope of actions, according to Fredrickson they have been harder to identify and differentiate using traditional models of emotion. Drawing upon Fredrickson's broaden-and-build model of positive emotions, Haidt (2003b) suggested a family of "other-praising" emotions, which included gratitude, awe, and elevation (see Table 1). *Gratitude* has been defined as a tendency to recognize and respond to the benevolence of others who have benefited the self, and it may promote the formation and maintenance of relationships (Algoe, Haidt, & Gable, 2008; McCullough et al., 2002). *Awe* has been defined as a responsiveness involving profound reverence to various kinds of threat, beauty, ability, virtue, or supernatural causality and is characterized by vastness and accommodation (Keltner & Haidt, 2003). *Elevation* has been defined as a warm, uplifting feeling experienced when one witnesses uncommon acts of goodness and compassion (Haidt, 2000). Algoe and Haidt (2009) later added *admiration* to this "other-praising" family of positive emotions, and defined it as our emotional response to non-moral excellence such as the witnessing of great skill or achievement. Elevation and admiration are thought to be similar to awe-related experiences but do not include awe's characteristic feature of "vastness" (Keltner & Haidt). Algoe and Haidt showed that elevation, gratitude, and admiration each had a characteristic motivational feature: elevation motivated participants desire to be warm or kind to others; gratitude motivated participants to give back to others or to affiliate with their benefactor; and admiration motivated people to improve some aspect of themselves and to become more successful.

Table 1

Self-transcending or other-praising emotions

Emotion	Definition	Motivational Behavior
Admiration	Emotional response to non-moral excellence	Self-improvement and/or desire to achieve success in a particular domain
Awe	Emotional responsiveness involving profound reverence, vastness, & accommodation	Motivation to improve the self and the greater good
Elevation	Warm, uplifting feeling experienced when witnessing uncommon acts of goodness	Desire to be warm or kind to others; emulate virtuous behavior
Gratitude	Tendency to recognize & respond to the benevolence of others	Desire to give back to others or affiliate with the benefactor

Reading descriptions of these other-praising, also called self-transcendent, emotions and their motivational features, it is hard to discern how inspiration might be differentiated from these feeling states. In fact, the most common free response women used to describe their feelings after watching an elevating video was “inspired” (Silvers & Haidt, 2008). In another study, participants assigned to either an admiration condition (watching a short video clip of Michael Jordan) or an elevation condition (watching a short video of moral beauty), were asked to rate their experience of 11 emotion words (Algoe & Haidt, 2009). An analysis of the ratings produced a three-factor solution, one of which included the items admiration, respect, moved, inspired, and awe, which was called the admiration factor. These findings highlight the difficulty of teasing these feelings states apart from one another and distinguishing them from the experience of inspiration.

Algoe and Haidt (2009), drawing on Thrash and Elliot’s (2003) conceptualization of inspiration as a motivational state, regarded inspiration to be the motivational output of admiration, providing energy for one to pursue goals or achieve success. Because admiration had an energizing quality and elevation did not, Algoe and Haidt made a clearer distinction between inspiration and elevation in that elevation was said to increase openness rather than energize immediate action. Landis et al. (2009) built on this distinction. In a study examining the relationship between elevation, the Five-Factor model of personality, and self-reported prosocial behavior, Landis et al. found that individuals reporting higher levels of elevation reported higher levels of prosocial behaviors, but given the study’s design, no conclusion could be made about whether elevation leads to a prosocial action tendency. In the absence of action, Landis et al. suggested experiencing elevation might fit more with the “inspired by” process of inspiration than with the “inspired to” (Thrash & Elliot, 2004). However, this distinction

between elevation and inspiration becomes less clear when elevation does lead to an immediate increase in prosocial behaviors (Aquino, McFerran, & Laven, 2011; Schnall, Roper, & Fessler, 2010).

Whether and how elevation, awe, and admiration uniquely differ needs further empirical investigation, but it is clear the three feeling states are somehow related, and all tend to serve some growth-oriented function (i.e., an improved self, improved relationships, prosocial behavior). Initial studies have shown that at least for elevation, sometimes its experience leads to prosocial behavior and at other times it does not. Anecdotally at least, we can imagine the same might be true for admiration and awe. For example, I might experience admiration for some great skill, but it may not always lead to a specific action on my part. Studies using social comparison theory have shown that the impact of outstanding role models depends on whether individuals find the outstanding other's success self-relevant and attainable (Lockwood & Kunda, 1997). Likewise, I might experience awe in the presence of the Grand Canyon, but no clear behavioral change or motivation results. Yet, in other circumstances and contexts, the experience of these emotions can lead to clear action, new aspirations, or new directions for one's life. What then is the difference?

I propose that inspiration accounts for the difference between just feeling a self-transcendent emotion and that experience leading to either an immediate action or long-term changes in one's behavior or goals. Colloquial uses of the term awe provide some insight here. People sometimes say, "I'm in awe," whereas at other times you might hear someone say that his or her experience was "awe-inspiring." The former phrase implies an emotional experience, while the latter implies some direct action took place as a result of the experience. Indeed, inspiration has been shown to correlate positively with the behavioral activation system (Thrash

& Elliot, 2003). People can experience any one of these feelings and it not lead to behavioral changes; however, when the experience of one of these feelings activates some type of motivation to enact a specific action tendency or transmit the experience into a tangible form, they have crossed into an inspirational experience, the key physiological distinction perhaps being the person's initial level of energization. This requires a re-conceptualization of the "by" and "to" components of inspiration (Thrash & Elliot, 2004). Without the inspired "to" component, which represents activation of motivation or a specific action tendency, the inspired "by" component is merely the experience of one of these self-transcending or other-praising emotions. For true inspiration to take place, there has to be some type of shift within a person leading to the motivation to manifest the experience in a tangible way, which could take on a variety of forms (i.e., a creative product, self-improvement, prosocial behavior, etc.). While the tripartite conceptualization of inspiration includes motivation, the "by" component of inspiration confuses it with these feeling states. As such, I propose that inspiration will include the experience of at least one of the self-transcending emotions, but inspiration must include energization and motivation to manifest the experience in order for it to be meaningfully distinguished from them empirically.

This conceptualization of inspiration and its related emotions helps to explain its diverse content domains. Keltner and Haidt (2003) used a prototype perspective to explain the variation of awe-related valence and awe-related states. Although inspiration is not a distinct emotion per se, this same idea might be applied to its experience. In this view, the prototype experience of inspiration will retain some essential components or features (i.e., evocation, motivation and transcendence), but variants of inspiration will exist depending on the type of emotion involved. This accounts for the diversity of content associated with experiencing inspiration, but there still

exists the need for a theoretical understanding of the diversity of its manifestations and impact on behavior. The next session will address this issue.

Inspiration and Motivation

Inspiration must involve behavioral activation of a specific action tendency or motivation to manifest the experience in a tangible way, but there still needs to be a theoretical understanding for why individuals sometimes act and sometimes do not. Furthermore, a testable model is needed to explain why people are motivated to act in different ways. Given the finding that other-praising emotions will differentially affect behavior and motivations (Algoe & Haidt, 2009), the type of emotion experienced will certainly play a role in outcome. For example, if feeling elevation and inspiration is experienced, one will likely act in some prosocial or pro-relational way. Likewise, if feeling admiration and inspiration is experienced, one will likely take an action that leads to some type of self-improvement or greater success in a particular domain of interest. However, as Haidt and Morris (2009) observed, behavioral reactions to these emotions remain to some degree more idiosyncratic than reactions to other emotions (Immordino-Yang, McColl, Damasio, & Damasio, 2009). For instance, while some in the admiration/Michael Jordan condition were motivated to make physical improvements, others in the same condition were motivated to achieve greater academic or professional success (Algoe & Haidt). I propose that contextualizing inspiration within the broader theoretical model of self-determination theory (Deci & Ryan, 1985, 2000) and specifically to Sheldon and Elliott's (1998, 1999) self-concordance model of individual goal-systems explains this variation.

Deci and Vansteenkiste (2004) proposed that self-determination theory (SDT) might be an ideal macro-theoretical framework for studying and integrating a lot of the work within positive psychology. The assumptions of this theory that dovetail nicely with positive

psychology are that human beings are inherently proactive, that they inherently move toward optimal growth and integrated functioning, and that the social environment can facilitate or thwart this process (Deci & Vansteenkiste). SDT at its core is a theory for human motivation and goal-directed behavior (Deci & Ryan, 1985, 2000). Like drive theories, SDT considers human behavior to be motivated by innate needs; however, the focus of the theory is on psychological needs rather than biological drives. Unlike traditional drive theory, SDT views human beings as active agents, pursuing activities of interest and personal coherence rather than viewing them as passive agents who are motivated to act only when physiological deficits are recognized. Deci and Ryan (1985, 1991) propose that the essential psychological needs basic to human nature are needs for autonomy, competence, and relatedness. Within this framework, *autonomy* refers to an individual's need to act volitionally in accordance with their integrated sense of self; *competence* refers to one's inherent need to act effectually in his or her environments; and *relatedness* refers to one's need to connect with others.

SDT makes important distinctions between intrinsic versus extrinsic motivation, wherein intrinsically motivated behaviors concern the free pursuit of activities of interest that promote growth, and extrinsic motivation can be subdivided into four categories with varying degrees of autonomous regulation (Ryan, Connell, & Deci, 1985). *External regulation* concerns behavior that is motivated by external rewards or the threat of punishment. *Introjected regulation* is similar to external regulation in that behavior is fairly controlled by consequences, only in this case the pressure is applied from within the individual. Examples of this would include behavior regulated by self-esteem contingencies or the threat of self-imposed guilt or shame. *Identified regulation* concerns behavior that is more fully internalized and is motivated by recognition of its underlying value. Finally, *integrated regulation* most closely approximates the definition of

intrinsic motivation in that what once was maybe externally regulated has now become a fully integrated part of the self and self-identity, and thus behavior is motivated by self-consistent expression. Taken together, these forms of motivation and regulatory styles represent a continuum of “perceived locus of causality” for behavior, which ranges from completely internal to completely external (Ryan & Connell, 1989). An example using religion serves as a good illustration of this process. Children or adolescents may attend religious services when they are young because parents require it and some type of reward or punishment is contingent upon their level of compliance (i.e., external regulation). As an emerging adult, an individual may continue to attend religious services because he or she might experience self-condemnation in the form of guilt or shame if attendance is forsaken (i.e., introjected regulation). Over time, an individual may begin to see the underlying value of attending religious services and recognize its contribution to individual or relational well-being (i.e., identified regulation). However, at some point, an individual may come to view himself or herself as a highly religious person and being religious is integrated with all other aspects of his or her life (i.e., integrated regulation). In their review of research on regulatory styles, Deci and Ryan (2000) found that identified and integrated regulatory styles were consistently associated with greater persistence, more effective performance, and greater physical and mental well-being.

The concept of perceived locus of causality has been applied to both people’s personal goal strivings and short-term personal projects. Drawing upon this idea and SDT theory, Sheldon and Elliot (1998, 1999) tested a self-concordance model of goal striving. Goals were considered to be self-concordant (defined as goals that express enduring interests and values) when pursued for either intrinsic (or integrated) or identified motives. In a series of longitudinal studies, Sheldon and Elliot (1999) found that self-concordant goals received more sustained

effort over time and were more likely to be attained. Additionally, they found that the attainment of goals was associated with more need-satisfying experiences of autonomy, competence, and relatedness. Self-concordance moderated the association between goal attainment and need satisfaction. Finally, Sheldon and Elliot found that the experience of need-satisfying experiences enhanced well-being. These need-satisfying experiences based on SDT partially mediated the effect on well-being, but a direct effect of goal-attainment on well-being remained (see Figure 1). Based on these findings and the larger context of SDT, it seems that our choice of goal pursuits and their ability to meet basic psychological needs when these pursuits are consistent with our inmost desires and values have important implications for overall psychological health.

The concept of intrinsic motivation may be similar to “peak experiences” (Maslow, 1964) and flow (Csikszentmihalyi, 1997) in that when individuals are motivated by intrinsic values, they may experience intense interest and absorption in their chosen activities (Sheldon & Kasser, 2001). Studies have shown that people tend to move toward intrinsic goals over time, which is purported to be evidence for Roger’s (1951) conceptualization of the organismic valuing process (Sheldon, Arndt, Houser-Marko, 2003). Essentially, the organismic valuing process is theorized to be the innate tendency within humans to move toward optimal development, which is consistent with the philosophical assumptions of SDT. Taken together, the concepts of the organismic valuing process, intrinsic motivation, perceived locus of causality, and SDT come together to form a valuable framework for understanding positive human motivation and what leads to optimal human functioning. Within this framework, goal selection and personal strivings play a significant role, and those that are intrinsically motivated and based on core values and interests (self-concordant) lead to greater well-being, creativity, life-satisfaction, empathy, and prosociality (Sheldon, 1995; Sheldon & Elliot, 1998, 1999; Sheldon & Kasser,

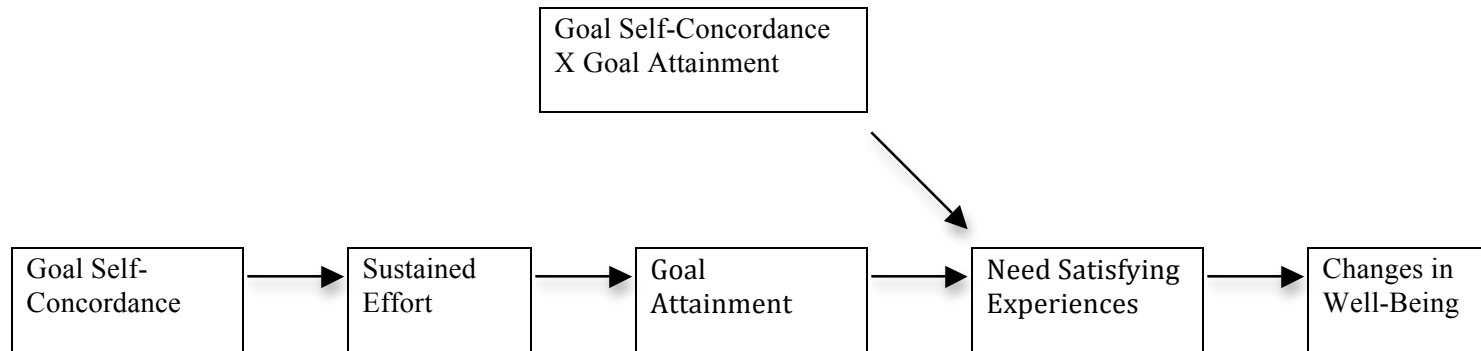


Figure 1. Self-Concordance Model (Sheldon & Elliott, 1999)

1995; Sheldon & McGregor, 2000; Sheldon, Sheldon, & Osbaldiston, 2000). However, because our innate tendency to move toward optimal development can become easily derailed by less than optimal environments, choosing goal pursuits and personal strivings that are self-concordant and based on intrinsic motivation can be a difficult task. As such, Sheldon and Kasser (2001) observed that an important question for researchers is determining what types of motivational systems promote or inhibit this process. In other words, how do individuals select self-concordant goals maximizing need satisfaction instead of selecting goals that are not representative of enduring values and interests?

I propose that inspiration is a positive motivational state that can be a key experience in determining self-concordant goals and personal strivings. Inspiration is thus conceptualized as a particularly salient emotional *and* motivational state that is experienced when content in any particular domain, be it spiritual, creative, interpersonal, etc., aligns with one's internalized values and interests. I call this the *value-specificity hypothesis* of inspiration. Essentially, this states that people experience inspiration across various domains when the content of that domain is concordant with the self. As a result of the inspirational experience, they are then motivated to enact a specific action tendency or pursue a goal that is value-congruent, which can impact both immediate actions and long-term behavior (see Figure 2). In the case of immediate action, an inspirational experience may lead an individual to engage in helping another person, such as when elevation leads to prosocial behavior. In regard to long-term behavior, inspirational experiences can fuel and solidify existing intrinsic goals or lead to the creation of new goal pursuits that are more in line with one's authentic self. However, consistent with SDT, the environment must be conducive to achieving the goal pursuits or this process can be thwarted. In other words, inspirational experiences only become manifest when a person's needs for

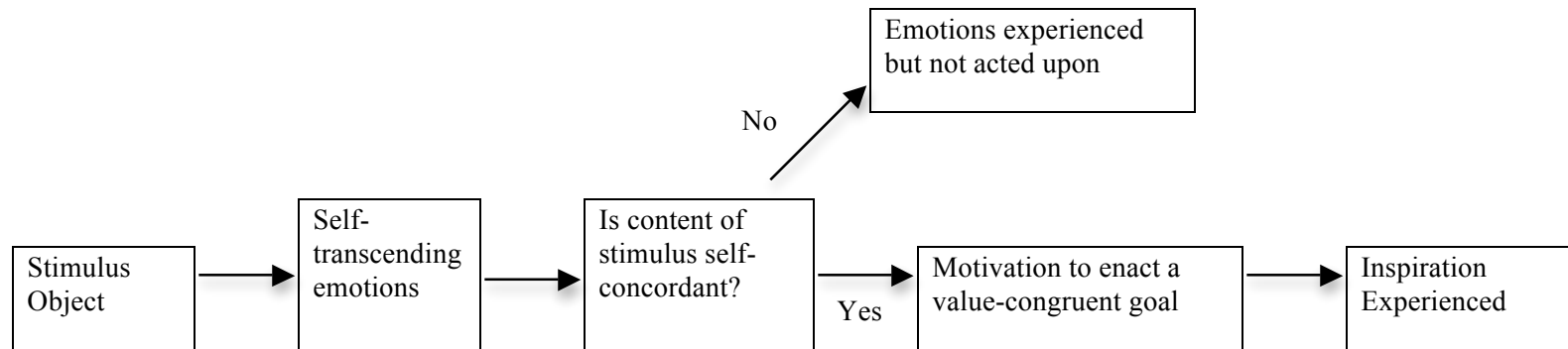


Figure 2. Value-Congruent Model of Inspiration

autonomy, competence, and relatedness are being met. For example, a person may have an inspirational experience and develop a new personal aspiration as a result, but if past experience has led them to feel ineffectual at achieving goals (low competence) or he or she has poor social resources (low relatedness), the experience may be lost. This explains why some inspirational experiences manifest in a tangible way while other experiences do not, but it does not detract from inspiration's core characteristic of motivation and its energizing quality.

The present conceptualization of inspiration is consistent with findings that it is associated with intrinsic motivation, perceived competence, self-esteem, optimism, self-determination, and greater well-being (Thrash & Elliot, 2003; Thrash et al., 2010), and it provides a theoretical framework for understanding its origin and function. Additionally, some evidence for the value-specificity hypothesis already exists. In a series of studies on elevation, Aquino et al. (2011) found that people for whom moral identity was a more internalized part of their self-identity were more likely to experience elevation in response to a morally elevating event, and they were more motivated to act prosocially as a result. The effect of being exposed to an act of uncommon goodness and moral identity centrality extended to actual behavior and was fully mediated by the experience of elevation. However, in the absence of a standardized instrument for measuring elevation, items created to assess the emotional component of elevation included the terms compassion, inspired, awe, and admiration. Although the average person may not make a distinction between feeling inspired and elevation (e.g., Haidt, 2000), I contend that this way of measuring elevation confuses the two constructs empirically and does not account for inspiration's motivating role on behavior when content is self-congruent.

Inspiration: Emotional and Motivational Integration

Tying together the literature on positive emotions and positive motivation, I define *inspiration* as a motivational state experienced when self-transcending or other-praising emotions are triggered by a value-congruent stimulus and activate a desire to express or enact a value-congruent goal. The above conceptualization and present definition of inspiration are important for furthering scientific investigation of the construct for several reasons: (a) it provides a meaningful way of distinguishing inspiration from its related positive emotions; (b) it integrates current theorizing on positive emotions and motivation to provide a theoretical framework for understanding and studying its origin, processes, and function; and (c) it provides a theoretically grounded definition that accounts for inspiration's emotional component that can be empirically tested to further validate its unique influence on human motivation and behavior. In the next chapter, I present two initial studies designed to examine this conceptualization and test my definition.

General Statement of the Problem

Psychological research has amassed a wealth of knowledge on psychopathology and constructs that impair human functioning, but many constructs that promote well-being and optimal human functioning remain in the nascent stages of research. The study of inspiration as a psychological construct has received little empirical attention to date, and much is yet to be learned about its correlates and mechanisms of influence on human behavior and relationships. Inspiration is often cited as the source of many great achievements, works of art, and prosocial causes, but virtually no empirical studies have examined the associated emotions of inspiration or tested a theoretical framework for understanding its mechanisms of influence.

Empirical studies have helped to establish inspiration as a distinct construct and have shed light on some of its core characteristics, antecedents, processes, and correlates (Thrash & Elliot, 2003, 2004; Thrash et al., 2010a; Thrash et al., 2010b); however, the current state of scientific investigation leaves many questions unanswered. To advance the study of inspiration, I have proposed: (a) inspiration needs to be contextualized within a unifying, theoretical framework from which theoretically grounded hypotheses can be generated for future studies; (b) its emotional correlates need to be empirically investigated, and it must be meaningfully distinguished from emotions that involve similar characteristics (i.e., elevation, admiration, awe); and (c) a theoretically grounded definition of inspiration that accounts for its emotional component needs to be established and empirically tested to further validate its unique influence on human motivation and behavior. Following are two studies designed to examine inspiration's emotional correlates, distinguish inspiration from its related emotions, and test a theoretical framework and definition of inspiration in order to advance our understanding of the construct and provide a basis for future studies.

Purpose of the Present Studies

The purpose of the present studies is to further our understanding of inspiration by investigating its correlates and related emotions, its relationship to individual identity and personal values, and its role in motivating value-congruent behavior. The treatment outcome of interest is inspiration's effect on helping attitudes and behavior. I hypothesize that state inspiration is significantly correlated to self-transcending and other-praising emotions such as elevation, awe, and admiration, and that experiencing inspiration increases motivation toward enacting value-congruent behaviors and goals. Additionally, I hypothesize that individuals experience greater inspiration when inspiring material is concordant with self-identified convictions and values based on self-determination theory (Deci & Ryan, 1985) and the model of self-concordance developed by Sheldon and Elliot (1999), and that self-concordant inspiration will predict subsequent behavior intentions. I conducted two studies to test my hypotheses.

In Study 1, I use a correlational and between-subjects experimental design to examine inspiration's correlates and relationship to different emotions. I also test whether individuals who experience inspiration from various domains (i.e., artistic beauty and natural beauty) experience greater inspiration when the inspirational content is self-concordant. In Study 2, I use a between-subjects experimental design to replicate the self-concordant hypothesis from Study 1 with a different measure of internalized values, and I test whether the experience of inspirational material that is self-concordant predicts behavioral intentions and one's willingness to volunteer.

The two studies test the following general hypotheses. (1) Inspiration will be significantly correlated to feelings of elevation, awe, and admiration. (2) Individuals who experience inspiration in two conditions of different inspirational content will report higher helping attitudes than the control condition. (3) Individuals who report greater self-concordance

for inspirational content will report greater state inspiration than those for whom the content is less self-concordant. (4) The experience of self-concordant inspiration will predict behavioral intentions and one's willingness to volunteer.

Study 1: Inspiration: Its Correlates, Related Emotions, and Concordance with Personal Values and Meaning Systems

Method

Participants. Participants for this study ($N = 134$) consisted of undergraduate students in psychology and other participating courses from a large Mid-Atlantic urban university. The mean age was 19.9 years ($SD = 2.20$). The sample was ethnically diverse (44.3% White/Caucasian, 23.3% Black/African American, 13.1% Asian/Asian American, 8% Latino/Latina, 3.4% Arabic, and 7.9% Other or did not report). Participants were recruited through SONA-systems and participated as part of a course requirement or in exchange for a small amount of course credit.

Design. This study used a cross-sectional, correlational, and experimental design. The independent variable was presence or absence of an inspirational stimulus video. Two inspirational videos were used: (a) artistic beauty and (b) natural beauty. A neutral (non-inspirational) video on how to tie a Windsor knot was used as a control. Pre-manipulation measures predicted response to the videos. Post-manipulation measures were dependent variables.

Pre-manipulation (predictor) measures.

Assessment of Spirituality and Religious Sentiments (ASPIRES; Piedmont, 2004). The ASPIRES (see Appendix A) consists of 23-items that measure spirituality and religious sentiments on three subscales: Universality, Prayer Fulfillment, and Connectedness. Participants

reported their gender, age, race, and religious affiliation, and items were rated on a 5-point rating scale from 1 = *strongly agree* to 5 = *strongly disagree*. Examples of subscale items include, “I feel that on a higher level all of us share a common bond” (Universality), “I do not have strong emotional ties to someone who has died” (Connectedness), and “I find inner strength and/or peace from my prayers and/or meditations” (Prayer Fulfillment). The three subscales when added together provide an overall measure of spiritual transcendence. The Spiritual Transcendence Scale had a Cronbach’s alpha of .89. Spiritual transcendence has been positively correlated with hope, positive affect, prosocial behavior, and purpose in life, and negatively correlated with negative affect and individualism (Piedmont, 2004). The alpha coefficient for the Spiritual Transcendence Scale for the current sample was .85.

Engagement with Beauty Scale (EBS; Diessner, Parsons, Solom, Frost, & Davidson, 2008). The EBS (see Appendix A) is a 14-item self-report instrument with three subscales measuring engagement with artistic beauty (e.g., “When perceiving beauty in a work of art I feel emotional, it “moves me,” such as feeling a sense of awe, or wonder or excitement or admiration or upliftment”; 4 items), engagement with natural beauty (e.g., “When perceiving beauty in nature I feel something like a spiritual experience, perhaps a sense of oneness, or being united with the universe, or a love of the entire world”; 4 items), and engagement with moral beauty (e.g., “When perceiving an act of moral beauty I find that I desire to become a better person”; 6 items). The subscales of interest for the present study were engagement with artistic beauty and engagement with natural beauty. Participants endorsed the accuracy of items using a 7-point rating scale from 1 = *very unlike me* to 7 = *very much like me*. The EBS has been shown to have internal consistency across translations in studies in Iran, Samoa, Germany, Cyprus, and Croatia (Richel et al., 2008; Susnjic & Diessner, 2008) with Cronbach’s alphas ranging from .85-.94. It

is positively correlated with gratitude, mindfulness, and spiritual transcendence, and it is negatively correlated with materialistic values (Cattron, 2008; Diessner et al.). The alpha coefficients for the current sample were .84 for the engagement with artistic beauty subscale and .80 for the engagement with natural beauty subscale.

The Gratitude Questionnaire (GQ-6; McCullough, Emmons, & Tsang, 2002). The GQ-6 (see Appendix A) is a 6-item self-report measure of a trait gratitude disposition. Items (e.g. “I have so much in life to be thankful for” and “I am grateful to a wide variety of people”) are rated on a 7-point rating scale from 1 = *strongly disagree* to 7 = *strongly agree*. The GQ-6 has been positively correlated with positive emotions, hope, empathy, sharing, and satisfaction with life, and the estimated internal consistency reliability of the scale was $\alpha = .82$ (McCullough et al.). For the current sample, α was .68.

The Herth Hope Index (HHI; Herth, 1992). The HHI (see Appendix A) is composed of 12 items that measure an individual’s level of hope. Items (e.g., “I have a positive outlook towards life” and “I can see possibilities in the midst of difficulties”) were rated on a 4-point rating scale from 1 = *strongly disagree* to 4 = *strongly agree*. The HHI is supported by evidence for estimated internal consistency (Cronbach’s $\alpha = .97$), content validity, and criterion-related validity (Herth). The α for the current sample was .84.

Inspiration Scale (IS; Thrash & Elliot, 2003). The Inspiration Scale (see Appendix A) is a 4-item measure of trait inspiration consisting of two internally consistent factors – frequency and intensity. Each item is rated twice for each factor. Cronbach’s α of the overall index was .95 in the initial sample. It has been shown to have test-retest reliability and construct validity (Thrash & Elliot, 2003, 2004). Participants rated each of the four items (e.g., “I experience inspiration” and “I am inspired to do something”) for frequency and intensity on a 7-

point rating scale from 1 = *never* to 7 = *very often* for frequency and from 1 = *not at all deeply or strongly* to 7 = *very deeply or strongly* for intensity. Participants completed the trait measure prior to the manipulation, and I modified items to capture their level of state inspiration, which was completed after the manipulation. The alpha coefficient for the current sample was .88 for trait inspiration and .97 for state inspiration.

Post-manipulation (outcome) measures. The Inspiration Scale (state) was used as a dependent measure and is described above. Additional measures used after the manipulation are described below.

Admiration. I created a 6-item scale to measure level of state admiration for an individual after viewing extraordinary prosocial behavior (see Appendix A). Participants rated items (e.g., “I feel like this person has the qualities of a hero” and “I would like to be more like this person”) according to how they felt about the acts they had just witnessed on a 5-point rating scale from 1 = *strongly disagree* to 5 = *strongly agree*. The alpha for the current sample was .96.

Awe. A 6-item instrument was used to measure participants’ current feelings of awe (see Appendix A). Four of the items (e.g., “I am caught up in the wonderment of life” and “I feel like a child who is awestruck”) were adapted from a longer subscale used to measure awe from the Appreciation Scale developed by Adler and Fagley (2005). Participants rated how each statement described their current feeling on a 5-point rating scale from 1 = *strongly disagree* to 5 = *strongly agree*. The alpha for the current sample was .91.

Elevation. Ten items were used to measure the feeling of state elevation, which were developed by Haidt (received from Martin Sherman, personal communication, February 3, 2011; see Appendix A). Landis et al. (2009) found the 10 items loaded on two factors. According to Landis et al., one of the factors appeared to measure a feeling of connectedness to others, while

the other factor related to the physiological reactions of elevation. The Cronbach's alphas for items on each of the two factors were .80 and .71, respectively. Participants rated their level of agreement with each item (e.g., "I got tears in my eyes during this experience" and "I feel a warm or glowing feeling in my chest") according to how they currently felt on a 5-point rating scale from 1 = *strongly disagree* to 5 = *strongly agree*. The alpha for the current sample was .94.

Helping Attitudes Scale (HAS; Nickell, 2008). The HAS (see Appendix A) is a 20-item instrument that measures beliefs, feelings, and behaviors related to helping others. Items (e.g., "I would enjoy helping others who are in need" and "Doing volunteer work would make me feel happy") were rated on a 5-point scale from 1 = *strongly disagree* to 5 = *strongly agree* and were adapted to reflect current feelings. The alpha for the current sample was .90.

Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988). The Positive and Negative Affect Scale (see Appendix A) consists of 20 adjectives that measure positive and negative affect at either the state or trait level. Participants indicated how much they were currently experiencing (state level) each feeling on a 5-point rating scale from 1 = *Very slightly or not at all* to 5 = *Extremely*. The PANAS has strong estimated internal consistency, with Cronbach's alphas ranging from .86 to .90 for the positive affect subscale and .84 to .87 for the negative affect subscale (Watson et al., 1988). The scale has shown evidence of construct validity and was found to be related to measures of general distress and dysfunction, depression, and anxiety (Watson et al.). The alpha for the current sample was .90 for the positive affect subscale and .86 for the negative affect subscale.

Procedure. Participants were recruited from undergraduate psychology classes using the SONA system as part of a course requirement or in exchange for a small amount of course credit. Participants reported to a lab/classroom at the appropriate time for which they signed-up.

Participants were briefed and the study's procedures explained. After signing consents agreeing to participate in the study, participants completed the pre-manipulation measures – ASPIRES, EBS, GQ-6, HHI, and the Inspiration Scale (trait level). After completing the measures, participants watched one of two video clips of inspirational material or a neutral, non-inspirational video, each of similar length. The two inspirational videos contained content of (a) artistic beauty (artistic inspiration condition) and (b) natural beauty (nature inspiration condition). The neutral video was a visual instruction on how to tie a Windsor knot; it was meant to elicit little emotion or inspiration, so it was used as the non-inspiration control condition. After watching the video, participants completed the post-manipulation measures for state levels of admiration, awe, elevation, helping attitudes, inspiration, and current affect. After completing the questionnaires participants were debriefed and allowed to ask any additional questions regarding the study. Participants received partial course credit for their participation.

Hypotheses and Planned Analyses

Hypothesis #1.

Statement. Trait inspiration will correlate positively with spiritual transcendence, and dispositions of gratitude and hope.

Justification. A core characteristic of inspiration is transcendence or being oriented above one's usual concerns. It has been related to optimism and gratitude, as well as well-being variables such as life satisfaction and self-actualization (Thrash & Elliott, 2003, 2004; Thrash et al., 2010). Spiritual transcendence has likewise shown positive correlations with well-being variables such as hope and purpose in life (Piedmont, 2004). Therefore, it is likely that people high in trait inspiration will also show higher levels of spiritual transcendence.

Analysis. The Pearson product moment correlation was computed between trait inspiration and spiritual transcendence, gratitude, and hope.

Hypothesis #2.

Statement. State inspiration will correlate positively with feelings of admiration, awe, and elevation.

Justification. It has been theorized that inspiration can be evoked by a number of different external stimuli with different motives and emotions playing a role in each (Thrash & Elliott, 2003). Following Thrash and Elliott's conceptualization of inspiration as an appetitive motivational state, it is believed several emotions can either collectively or singularly play a role in one "feeling" inspired. Elevation, admiration, and awe have been thought of as distinct, self-transcending emotions of appreciation or other-praising emotions, and all three, though not tested, are believed to share similarities with inspiration (Algoe & Haidt, 2009; Haidt & Morris, 2009; Keltner & Haidt, 2003; Ortony, Clore, & Collings, 1988).

Analysis. The Pearson product moment correlation was computed between state inspiration and admiration, awe, and elevation.

Hypothesis #3.

Statement. Inspiration will be factorially distinct from its related feeling states.

Justification. One of inspiration's defining characteristics is motivation (Thrash & Elliot, 2003). Although inspiration includes feeling several different types of self-transcendent emotions, its energizing quality should distinguish it from these related feeling states. Inspiration has been shown to be factorially distinct from awe (Thrash et al. 2010b), so it is likely to be factorially distinct from the related emotions of elevation and admiration as well.

Analysis. Confirmatory factor analysis was used to examine the discriminant validity of each construct. I compared a one-factor solution specifying a single latent construct underlying items on the inspiration and other respective scales with a two-factor solution specifying the items on the inspiration scale and each of the other respective scales load on distinct but correlated latent variables. Improvement of model fit from the one-factor to the two-factor model was evaluated with the delta Chi-square ($\Delta\chi^2$), CFI, test.

Hypothesis #4.

Statement. Participants in the inspiration conditions will show significantly higher helping attitudes than will those in the non-inspiration control condition even after controlling for trait inspiration.

Justification. A core characteristic of inspiration is transcendence of one's usual concerns (Thrash & Elliott, 2004), and feelings related to inspiration (i.e., elevation) have been linked to prosocial action tendencies (Algoe & Haidt, 2009; Freeman, Aquino, & McFerran, 2009). Accordingly, I expect individuals in the inspiration conditions to have a higher helping attitude than those in the control condition.

Analysis. A one-way, between-groups ANCOVA was used to test for significant differences between the three conditions followed by post-hoc tests to determine where the differences were located.

Hypothesis #5.

Statement. Engagement with beauty scores and the inspiration conditions will interact to predict state inspiration. Specifically, participants in the artistic inspiration condition with higher scores on engagement with artistic beauty will experience greater inspiration than will those with low scores of artistic beauty engagement. Likewise, participants in the nature inspiration

condition who have higher scores on natural beauty engagement will have higher scores on inspiration than will those with low scores on natural beauty engagement. Participants in the non-inspiration control condition will show no differences on state inspiration.

Justification. Studies have shown that identity, specificity of values, and intrapersonal correlates influence whether individuals act in prosocial ways (Aquino et al., 2011; Benson et al., 1980; Wollman et al., 1980). Based on the self-concordance model developed by Sheldon and Elliott (1999), I expect the same to be true for inspiration. That is, when the inspirational content is concordant with individual meaning and values, people will experience higher levels of inspiration.

Analysis. I conducted two hierarchical regressions with inspiration as the criterion variable and the two subscales of the EBS (artistic beauty and natural beauty) as moderators. Continuous moderator variables were centered to reduce multicollinearity. In Step 1, the dummy coded predictor variables and centered moderators were entered. In Step 2, the interaction term was entered. For each significant interaction, I performed simple main effects testing to determine the nature of the interaction.

Results

Preliminary analysis. Descriptive statistics for all variables are provided in Table 2. Prior to conducting the primary statistical analyses, the data were assessed for missing data, normality, and the presence of outliers. Cases with 10% or less missing data per variable were

Table 2

Descriptive Statistics for Study 1 Variables

Variable	<i>a</i>	<i>N</i>	Min	Max	<i>M</i>	<i>SD</i>	Skew	Kurt
Pre-manipulation Variables (traits)								
ASPIRES (spiritual transcendence)	.85	176	51	108	82.44	11.68	-.11	-.28
EBS (artistic beauty)	.84	176	4	28	18.17	5.46	-.22	-.40
EBS (natural beauty)	.80	176	6	28	19.82	4.98	-.37	-.41
GQ-6 (gratitude)	.68	176	23	42	36.43	4.11	-.84	.53
HHI (hope)	.84	174	24	48	39.69	4.78	-.55	.33
Inspiration	.88	176	26	56	43.11	6.28	-.23	.02
Post-manipulation (outcome) Variables (states)								
Admiration	.96	176	6	30	22.48	6.41	-.61	-.48
Awe	.91	176	6	30	22.70	5.30	-.61	.08
Elevation	.94	176	10	50	32.36	10.03	-.42	-.46
HAS (helping attitudes)	.90	175	55	100	83.24	9.94	-.28	-.42
Inspiration	.97	176	4	28	20.71	7.05	-1.09	.26
PANAS (positive affect)	.90	176	10	50	33.80	11.20	-.44	-.91
PANAS (negative affect)	.86	175	10	42	14.11	5.31	1.93	4.87
Negative affect (Log10 transformation)	-	175	1	1.62	1.13	.14	1.04	.49

Note. *a* = alpha; ASPIRES = Assessment of Spirituality and Religious Sentiments; EBS = Engagement with Beauty Scale; GQ-6 = The Gratitude Questionnaire; HHI – Herth Hope Index; HAS = Helping Attitudes Scale; PANAS = Positive and Negative Affect Schedule

treated using mean substitution. The remainder of missing data were addressed using pairwise deletion. Negative affect was positively skewed and kurtotic and was transformed with a Log10 transformation. There were only a few outliers, and all outliers fell within the expected ranges of the scales and were thus retained.

Test of Hypothesis #1 and Hypothesis #2. I hypothesized that trait inspiration would correlate positively with spiritual transcendence, gratitude, and hope, and that state inspiration would correlate positively with the self-transcending emotions admiration, awe, and elevation. I conducted a Pearson product moment correlation to test these hypotheses. Relationships between variables were significant in the predicted directions (see Table 3). Trait inspiration had a small correlation with spiritual transcendence and gratitude and a moderate correlation with hope. State inspiration had strong correlations with admiration, awe, and elevation.

Test of Hypothesis #3. Although inspiration is strongly related to self-transcending emotions, I predicted it would also be distinct from them. To test this hypothesis, I ran a set of confirmatory factor analyses to test for discriminant validity. For each test of discriminant validity, a one-factor model specifying items of the inspiration scale and each set of the self-transcending emotions items (admiration, awe, and elevation) had a single underlying latent construct was compared to a two-factor model specifying items on the inspiration scale and each of the self-transcending emotions scales loaded on distinct but correlated latent variables. I evaluated the fit of the one-factor and two-factor models with the chi-square, CFI, and RMSEA indices and then evaluated improvement of model fit from the one-factor to the two-factor model with the delta Chi-square ($\Delta\chi^2$), CFI, test.

The one-factor model combining state inspiration items with admiration items did not fit the data well, $\chi^2(54, N = 134) = 361.91$, CFI = .84, RMSEA = .184. In contrast, the two-factor

Table 3

Correlation Matrix of Study 1 Variables

	Trait Inspiration	Spiritual Trans.	Gratitude	Hope	State Inspiration	Admir.	Awe	Elevation	Helping Attitudes	Neg. Affect	Pos. Affect
Trait Variables											
Trait Inspiration	1	–	–	–	–	–	–	–	–		
Spiritual Transcendence	.297**	1	–	–	–	–	–	–	–		
Gratitude (GQ-6)	.261**	.285**	1	–	–	–	–	–	–		
Hope (HHI)	.458**	.312**	.537**	1	–	–	–	–	–		
State Variables											
State Inspiration	.162*	.289**	.132	.108	1	–	–	–	–		
Admiration	.138	.295**	.157*	.179*	.825**	1	–	–	–		
Awe	.209**	.280**	.098	.141	.791**	.714**	1	–	–		
Elevation	.104	.234**	.076	.09	.823**	.786**	.851**	1	–		
Helping Attitudes (HAS)	.288**	.374**	.389**	.360**	.444**	.457**	.454**	.388**	1		
Negative Affect (NA)	-.075	-.059	-.199**	-.263**	-.149*	-.187*	-.218**	-.130	-.232**	1	
Positive Affect (PA)	.196**	.175*	.189*	.242**	.733**	.634**	.716**	.776**	.420**	-.138	1

Note. GQ-6 = Gratitude Questionnaire-6; HHI = Herth Hope Index; HAS = Helping Attitudes Scale

* $p < .01$, ** $p < .001$

model fit the data better, $\chi^2 (53, N = 134) = 111.67$, CFI = .97, RMSEA = .08, $\Delta\chi^2 = 250.24$, $p < .05$, indicating a significant improvement in model fit. Not only was there a significant improvement using $\Delta\chi^2$ but also the CFI and $\Delta\chi^2 / df$ were in acceptable ranges and the RMSEA was acceptable, though not strong.

The one-factor model for inspiration and awe did not fit the data well, $\chi^2 (35, N = 134) = 234.025$, CFI = .862, RMSEA = .183, and the two-factor model fit the data significantly better, $\chi^2 (34, N = 134) = 96.57$, CFI = .95, RMSEA = .10, $\Delta\chi^2 = 137.455$, $p < .05$. The CFI and $\Delta\chi^2 / df$ were in acceptable ranges and the RMSEA was a bit high (.08 is usually considered the highest acceptable, so .10 is not a good model fit from that one criterion.

Finally, the one-factor model for inspiration and elevation did not fit the data well, $\chi^2 (104, N = 134) = 301.75$, CFI = .915, RMSEA = .106, and the two-factor model fit the data significantly better, $\chi^2 (103, N = 134) = 252.967$, CFI = .936, RMSEA = .093, $\Delta\chi^2 = 48.783$, $p < .05$. The CFI and $\Delta\chi^2 / df$ were in acceptable ranges and the RMSEA was a bit high (.08 is usually considered the highest acceptable, so .093 is not a good model fit from that one criterion.

In each case, the two-factor model was superior to the one-factor model, indicating inspiration and each of the self-transcending emotions are correlated but reasonably distinctive. Thus Hypothesis 3 was supported.

Test of Hypothesis #4. In Hypothesis 4, I hypothesized there would be significant differences between the two inspiration conditions and the control condition on helping attitudes even after controlling for trait inspiration. To test this hypothesis, I ran a one-way analysis of covariance (ANCOVA) using trait inspiration as the covariate and helping attitudes as the dependent variable. Results of the ANCOVA indicated a significant difference between conditions existed after controlling for trait inspiration, $F (2, 130) = 3.06$, $p = .051$. Pairwise

comparisons that were Bonferroni corrected indicated that participants in the artistic inspiration condition ($M = 84.72$, $SD = 8.99$) had significantly higher scores on helping attitudes than did those in the non-inspiration control condition ($M = 79.43$, $SD = 9.53$). Participant scores in the nature inspiration condition ($M = 82.32$, $SD = 10.24$) did not differ from those in the non-inspiration control condition. Thus, Hypothesis 4 was partially supported.

Test of Hypothesis #5. To test whether engagement with beauty scores and the three conditions would interact to predict state inspiration, I conducted two parallel hierarchical regressions with state inspiration as the criterion variable. In the first regression, the predictor variables were condition and engagement with artistic beauty scores. I dummy-coded the artistic inspiration and non-inspiration control conditions and centered the continuous moderator variable to reduce multicollinearity. These were entered in Step 1 of the hierarchical regression, and the interaction term was entered in Step 2. The interaction between condition and engagement with artistic beauty approached significance, $\beta = .223$, $SE = .235$, $t = 1.89$, $p = .062$, when comparing the artistic inspiration condition to the non-inspiration control condition. An examination of simple slopes revealed that in the artistic inspiration condition, greater engagement with artistic beauty was related to significantly greater inspiration, $\beta = .212$, $SE = .142$, $t = 2.348$, $p = .021$. In the non-inspiration control condition, there was not a significant relationship between engagement with artistic beauty and inspiration, $\beta = -.071$, $SE = .188$, $t = -.593$, $p = .554$ (see Figure 3).

In the second hierarchical regression, the predictor variables were condition and engagement with natural beauty scores with state inspiration as the criterion variable. I dummy-coded the nature inspiration and non-inspiration control conditions and centered the continuous moderator variable to reduce multicollinearity. These were entered in Step 1 of the hierarchical

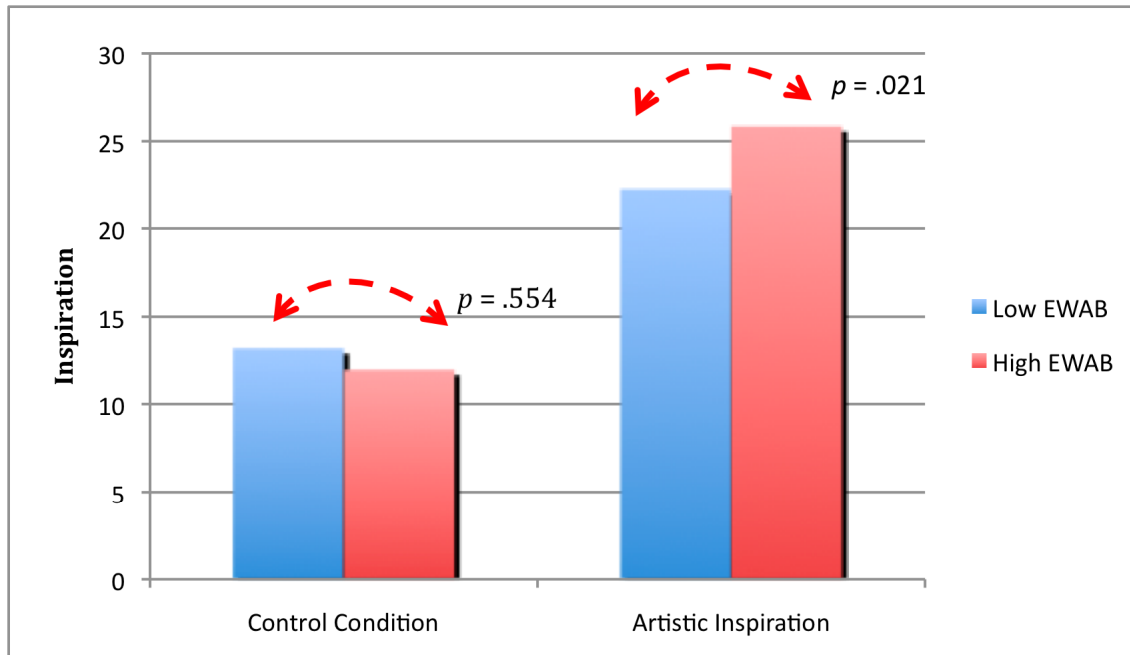


Figure 3. Graph of Simple Slopes Analysis of Condition and Engagement with Artistic Beauty on Inspiration.

regression, and the interaction term was entered in Step 2. The interaction between condition and engagement with natural beauty was significant when comparing the nature inspiration condition to the non-inspiration control, $\beta = .402$, $SE = .293$, $t = 2.525$, $p = .014$. An examination of simple slopes revealed there was no significant relationship between engagement with natural beauty and inspiration in the non-inspiration control condition, $\beta = -.267$, $SE = .238$, $t = -1.678$, $p = .098$. However, in the nature inspiration condition, greater engagement with natural beauty was related to significantly greater inspiration, $\beta = .229$, $SE = .172$, $t = 1.989$, $p = .05$ (see Figure 4). Thus, Hypothesis 5 was supported.

Discussion of Study 1

In Study 1, I investigated inspiration's relationship to trait dispositions of spiritual transcendence, hope, and gratitude and state levels of admiration, awe, and elevation. In addition, I tested whether state inspiration could also be distinguished from its related emotional components. Finally, I tested inspiration's relationship to general helping attitudes and whether self-concordant stimuli would predict the experience of inspiration (value-specificity hypothesis).

Consistent with my hypotheses, trait inspiration was positively related to dispositions of spiritual transcendence, hope, and gratitude, while state inspiration was positively related to self-transcendent/other-praising emotions admiration, awe, and elevation. The strong correlations between state inspiration and these related emotions suggest these feeling states may be an essential feature of state inspiration, providing initial support for my proposed definition and conceptualization. However, tests of discriminant validity supported that state inspiration and its emotional correlates are also reasonably distinct.

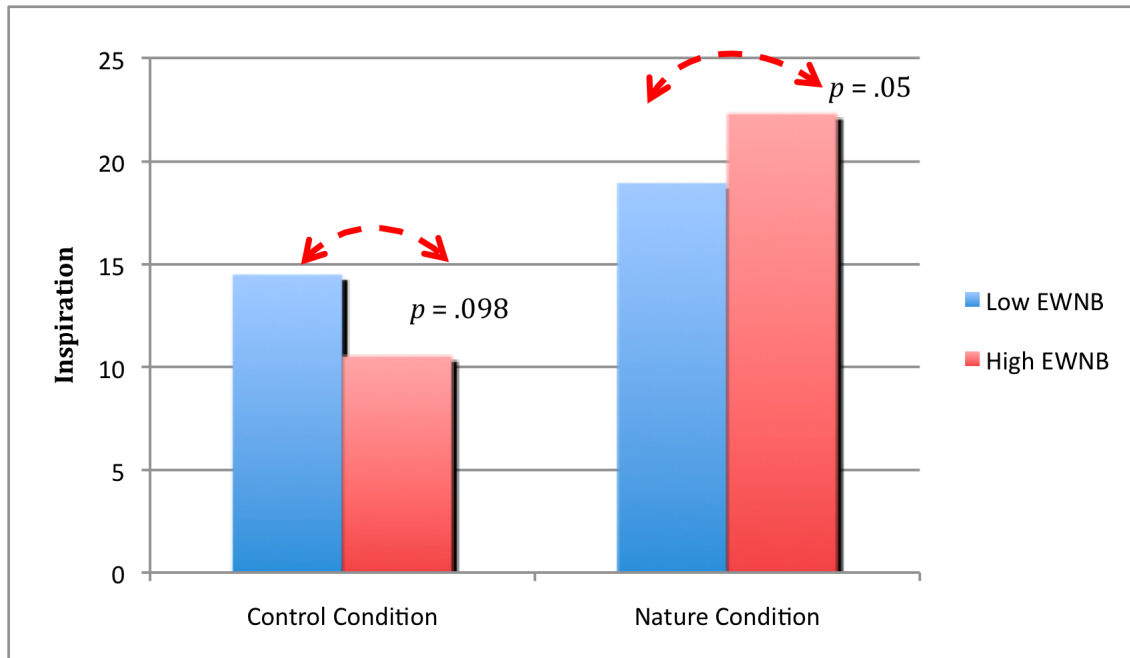


Figure 4. Graph of Simple Slopes Analysis of Condition and Engagement with Natural Beauty on Inspiration.

Results also showed that state inspiration was related to greater helping attitudes in the artistic inspiration condition but not in the nature inspiration condition. Although this finding only partially supported the initial hypothesis that individuals in both inspiration conditions would have greater helping attitudes than those in the control condition, the result is more consistent with the value-specificity hypothesis. In other words, inspiration may not relate to a general measure of prosocial behavior, but instead is related to more specific prosocial domains depending on an individual's internalized values and interests.

Study 1 evidenced initial support for the value-specificity hypothesis. In both inspiration conditions, individuals reporting greater engagement in the particular domain (e.g., artistic beauty or natural beauty) experienced greater state inspiration when the video manipulation was consistent with that domain. Individuals who reported high engagement with artistic beauty experienced greater inspiration than those who reported low engagement with artistic beauty after viewing a video highlighting artistic beauty. Likewise, individuals reporting high engagement with natural beauty experienced greater inspiration than those reporting low engagement with natural beauty after viewing a video highlighting the beauty of nature.

Together, the findings from Study 1 support the initial components of the Value-Congruent Model of Inspiration. Specifically, there is now empirical evidence that awe, admiration, and elevation are strong emotional correlates of inspiration, suggesting the experience of these self-transcending /other-praising emotions are a core emotional feature of experiencing inspiration. However, based on evidence of discriminant validity, inspiration is more than just the experience of these feelings. Additionally, value-congruent stimuli significantly predicted participants' experience of state inspiration, providing evidence that the more aligned stimulus content is with one's internalized values and interests, the greater

likelihood an individual will experience inspiration. The final component of the model and my proposed definition of inspiration, that the experience activates a desire to express or enact a value-congruent goal, is tested in Study 2.

Study 2: Value-Congruent Inspiration and Volunteer Behavior

Method

Participants. Participants for Study 2 ($N = 173$) consisted of undergraduate students from a large Mid-Atlantic urban university. The mean age was 20.1 years ($SD = 3.33$). The sample was ethnically diverse (54.9% White/Caucasian, 13.3% Black/African American, 15% Asian/Asian American, 6.4% Latino/Latina, 2.9% Arabic, and 7.5% Other or did not report). Participants were recruited from undergraduate classes and participated as part of a course requirement or in exchange for a small amount of course credit.

Design. This study used a cross-sectional, experimental design. The independent variable was presence or absence of an inspirational stimulus video. The inspirational video was the same video of natural beauty used in Study 1, and the non-inspirational video was the same video used in Study 1 on how to tie a Windsor knot. Pre-manipulation measures predicted response to the videos. Post-manipulation measures were dependent variables.

Pre-manipulation (predictor) measures.

Commitment to the Environment (CTE; Davis, Green, & Reed, 2009). The CTE (see Appendix B) is a trait measure comprised of 11 items adapted from Rusbult, Martz, and Agnew's (1998) close relationships scales. It assesses one's long-term orientation and psychological attachment to the environment. Items (e.g., "I feel very attached to the natural environment" and "I feel committed to keeping the best interests of the environment in mind") are rated on a 9-point scale (0 = *do not agree at all* to 8 = *agree completely*). The CTE has

shown evidence supporting estimated internal consistency (Cronbach's $\alpha = .91$) and an ability to predict ecological behavior and willingness to sacrifice for the environment (Davis et al., 2009; Davis, Le, & Coy, 2011). The alpha coefficient for the current sample was .95.

Self-concordance. Based upon concepts of self-determination theory, goals are considered self-concordant when pursued for either intrinsic or identified motivation (Sheldon & Elliott, 1999). Using the same continuum of perceived locus of causality used by Sheldon and Elliott, participants rated four potential reasons (external, introjected, identified, and intrinsic) for enacting behaviors to conserve the environment (see Appendix B). Participants rated items on a rating scale from 1 = *not at all for this reason* to 9 = *completely for this reason*. The introjected reason is, "I do things to help the environment because I would feel ashamed, guilty, or anxious if I didn't." The external reason is, "I do things to help the environment because somebody else wants me to or because the situation demands it." The identified reason is, "I do things to help the environment because I really believe it's an important goal to have." The intrinsic reason is, "I do things to help the environment because of the fun and enjoyment it provides me." The self-concordant variable is determined for each participant by subtracting the sum of the introjected and external scores from the sum of the identified and intrinsic scores. The self-concordance variable in the Sheldon and Elliott study had a Cronbach's α score of .80. In the current sample, the alpha coefficient was .56. Although lower alphas (e.g., .5) with shorter scales are not uncommon, I dropped one of the self-concordance items showing a weak correlation with the other three items due to low estimated reliability. This improved the alpha coefficient for the self-concordance measure from .58 to .73. Alpha coefficients above .7 are considered respectable, particularly for shorter scales (DeVellis, 2003). The three-item measure with the improved alpha coefficient was then used to test all hypotheses.

Post-manipulation (outcome) measures. The following outcome measures are described in Study 1 and are merely listed here: Inspiration Scale (state), Helping Attitudes Scale (HAS), Positive and Negative Affect Scale (PANAS; state), and state measures for admiration, awe, and elevation. Additional outcome measures used in the present study are described below.

Willingness to Sacrifice for the Environment (WTS; Davis et al., 2011). The WTS (see Appendix B) is a 5-item measure that assesses an individual's willingness to make sacrifices for the sake of the environment even at a cost to oneself. Examples of items include "I am willing to give things up that I like doing if they harm the natural environment" and "I am willing to go out of my way to do what is best for the environment." Participants respond using a 9-point scale from 0 = *do not agree at all* to 8 = *agree completely*. The WTS has shown evidence for estimated internal reliability (Cronbach's alpha = .88) and is positively correlated with general ecological behavior (Davis et al., 2011). The alpha coefficient for the current sample was .95. Participants' Willingness to Sacrifice for the Environment score was used as a measure of present (state) behavioral intentions toward environmental preservation.

Behavioral measures. Two behavioral measures were (a) whether a person took a page with information about volunteering for a local river clean-up and (b) whether the person followed up by emailing to volunteer (see Appendix B).

Procedure. Participants were recruited from undergraduate psychology classes using the SONA system as part of a course requirement or in exchange for a small amount of course credit. The study was advertised as an investigation of how people respond to solicitations for volunteering. Participants reported to a lab/classroom at the appropriate time for which they signed-up. Participants were briefed and the study's procedures explained. After signing consent agreeing to participate in the study, participants completed a short demographic

questionnaire and their level of commitment to the environment (trait). Participants then rated the four potential reasons (external, introjected, identified, and intrinsic) for enacting behaviors to conserve the environment. Afterward, participants watched either a video on the beauty of the natural environment that emphasizes the importance of preserving our natural resources (inspiration condition) or a non-inspirational video on how to tie a Windsor knot (non-inspiration control condition), each of similar length. Both videos were the same ones used in Study 1. After watching the video, participants completed the post-manipulation measures for admiration, awe, elevation, helping attitudes, inspiration (state level), current affect, and willingness to sacrifice for the environment as a measure of behavioral intentions.

At the end of the questionnaires, there was a final page explaining to participants an opportunity to sign-up and volunteer for a local organization called Friends of James River Park. The organization's purpose and volunteer opportunities were described and the organization's website was included. Participants were instructed to take the last page with the organization's contact information if they were interested in contacting them to do volunteer work. Unbeknownst to participants, the page contained a fictitious email that was monitored by the research coordinator. Upon leaving the lab, participants were debriefed and allowed to ask any additional questions regarding the study. Over the course of the following weeks, the research coordinator recorded names of participants who actually contacted him for more information on volunteering, and their names were paired with their questionnaire packet.

Taking the last page for more information on volunteering served as one behavioral measure, and actual follow-through served as a second behavioral measure. Any participants that contacted the research coordinator for more information were forwarded to Friends of James

River Park as potential volunteers. Participants received partial course credit for their participation.

Hypotheses and Planned Analyses

Hypothesis #1.

Statement. State inspiration will correlate positively with feelings of admiration, awe, and elevation, replicating the findings from Study 1, but it will have the strongest relationship with elevation, which was most highly correlated with inspiration in Study #1's nature inspiration condition.

Justification. As previously discussed, it is believed several emotions can play a role in one "feeling" inspired either collectively or singly. Elevation, admiration, and awe have been thought of as distinct, self-transcending emotions of appreciation or other-praising emotions, and are believed to share similarities with inspiration (Algoe & Haidt, 2009; Haidt & Morris, 2009; Keltner & Haidt, 2003; Ortony et al., 1988). If inspiration is related to several distinct emotions, then the emotional responses should be similar across two different samples viewing the same inspirational content.

Analysis. The Pearson product moment correlation was computed between state inspiration and admiration, awe, and elevation.

Hypothesis #2.

Statement. Participants in the inspiration condition will show a significant difference related to helping attitudes than will those in the non-inspiration control condition, replicating results from Study 1.

Justification. A core characteristic of inspiration is transcendence of one's usual concerns (Thrash & Elliott, 2004), and feelings related to inspiration (i.e., elevation) have been

linked to prosocial action tendencies (Algoe & Haidt, 2009; Freeman et al., 2009). Accordingly, I again expect individuals in the inspiration condition to have a higher helping attitude than those in the non-inspiration control condition.

Analysis. A one-way, between-groups ANCOVA was used to test for significant differences between the two conditions.

Hypothesis #3.

Statement. Participants' self-concordance scores and condition will interact to predict state inspiration. Specifically, participants in the inspiration condition with a higher self-concordance score will show higher scores of inspiration than will those with low self-concordance scores. Participants in the non-inspiration control condition will show no differences on inspiration.

Justification. Based on the self-concordance model developed by Sheldon and Elliott (1999), I expect similar results to Study 1 using the self-concordance variable as opposed to the Engagement with Beauty scale. That is, when the inspirational content is highly self-concordant, people will experience higher levels of inspiration. This will replicate findings from Study #1 as well as provide further support for my original hypothesis by showing significant results with a tested measurement of self-concordance (Sheldon & Elliot, 1998, 1999).

Analysis. I conducted a hierarchical regression with state inspiration as the criterion variable and the self-concordance variable as moderator. The continuous moderator variable was centered to reduce multicollinearity. In Step 1, the dummy coded predictor variable and centered moderator were entered. In Step 2, the interaction term was entered. For each significant interaction, I performed simple main effects testing to determine the nature of the interaction.

Hypothesis #4.

Statement. Self-concordance scores will predict behavioral intentions and volunteering behavior toward the environment. Specifically, participants with high self-concordance scores will score higher on willingness to sacrifice for the environment, and they will be more likely to take the information and contact the lab assistant than will participants with low self-concordance scores in the inspiration condition.

Justification. Based on studies that have shown that identity and specificity of values influence prosocial behavior (Aquino et al., 2011; Benson et al., 1980; Wollman et al., 1980), high self-concordance should predict the likelihood of participants' willingness to sacrifice for the environment and willingness to volunteer.

Analysis. I conducted a hierarchical regression with willingness to sacrifice for the environment as the criterion variable and the self-concordance variable as moderator. I also conducted two separate logistic regressions to determine whether participants with high self-concordance scores were more likely to take volunteering information and whether they were more likely to contact the lab assistant than were those with low self-concordance scores.

Results

Preliminary Analysis. Descriptive statistics for all variables are provided in Table 4. Prior to conducting the primary statistical analyses, the data were assessed for missing data, normality, and the presence of outliers. Cases with 10% or less missing data per variable were treated using mean substitution. The remaining missing data were addressed using pairwise deletion. Negative affect was positively skewed and kurtotic and was transformed with a Log10 transformation. There were only a few outliers. All outliers fell within the expected ranges of the scales and were thus retained.

Table 4

Descriptive Statistics for Study 2 Variables

Variable	<i>a</i>	<i>N</i>	Min	Max	<i>M</i>	<i>SD</i>	Skew	Kurt
Pre-manipulation Variables (trait)								
CTE (commitment)	.95	173	.64	7.91	5.08	1.65	-.266	-.428
Self-Concordance	.73	173	-4	16	6.84	3.62	.001	.059
Post-manipulation (outcome) Variables (state)								
Admiration	.96	173	6	30	18.87	6.78	-.186	-.839
Awe	.89	173	6	30	17.57	5.55	.130	-.478
Elevation	.90	173	10	50	23.42	8.22	.599	.006
HAS (helping attitudes)	.90	172	43	100	84.38	10.16	-.806	.822
Inspiration (state)	.98	173	4	28	15.18	7.80	-.094	-1.361
PANAS (positive affect)	.88	173	10	50	27.29	10.81	.265	-.829
PANAS (negative affect)	.85	173	10	29	14.11	4.84	1.55	1.80
WTS (willingness to sacrifice)	.95	173	0	40	25	9.57	-.453	-.173
Negative affect (Log10 transformation)	-	173	1	1.46	1.13	.13	1.009	.162

Note. *a* = alpha; CTE = Commitment to the Environment; HAS = Helping Attitudes Scale; PANAS = Positive and Negative Affect Schedule; WTS = Willingness to Sacrifice for the Environment.

Test of Hypothesis #1. I hypothesized state inspiration would show a similar relational pattern to admiration, awe, and elevation as it did in Study 1 by correlating the strongest with the same self-transcendent emotion with which it was most strongly correlated in the nature inspiration condition of Study 1. To test this hypothesis, I conducted a Pearson product moment correlation selecting only cases in the appropriate condition from each study. The relationships between state inspiration and each of the self-transcending emotions were significant in the predicted directions as in Study 1 (see Table 5). Inspiration had the strongest correlation with elevation in both studies within the nature inspiration conditions, thus Hypothesis 1 was supported.

Test of Hypothesis #2. In Hypothesis 2, I hypothesized participants in the inspiration condition would score higher on self-reported helping attitudes than would those in the non-inspiration control condition. To test this hypothesis, I conducted a one-way between-groups analysis of variance (ANOVA) using helping attitudes as the dependent variable. Results of the ANOVA were not significant, $F(1, 171) = .001, p = .988$, thus Hypothesis 2 was not supported.

Test of Hypothesis #3. To test whether self-concordant scores and condition would interact to predict state inspiration, I conducted a hierarchical regression with inspiration as the criterion variable. The predictor variables were the conditions and self-concordance scores. I dummy-coded the inspiration and non-inspiration control conditions and centered the continuous moderator variable to reduce multicollinearity. These were entered in Step 1 of the hierarchical regression, and the interaction term was entered in Step 2. The interaction between condition and self-concordance was significant, $\beta = .273, SE = .298, t = 2.458, p = .015$. An examination of simple slopes revealed that in the inspiration condition, greater self-concordance was related to significantly greater inspiration, $\beta = .331, SE = .176, t = 4.056, p < .001$. In the non-

Table 5

Correlation Matrix of Study 2 Variables

	Study 1 (Nature Inspiration Condition)				Study 2 (Inspiration Condition)			
	State Inspiration	Admiration	Awe	Elevation	State Inspiration	Admiration	Awe	Elevation
State Inspiration	1	–	–	–	1	–	–	–
Admiration	.825**	1	–	–	.729**	1	–	–
Awe	.791**	.714**	1	–	.649**	.628**	1	–
Elevation	.823**	.786**	.851**	1	.762**	.759**	.774**	1

** $p < .001$

inspiration control condition, there was not a significant relationship between self-concordance and inspiration, $\beta = -.008$, $SE = .240$, $t = -.069$, $p = .945$ (see Figure 5).

Test of Hypothesis #4. To test whether participants in the inspiration condition with high self-concordance would exhibit greater willingness to sacrifice for the environment, I conducted a hierarchical regression with willingness to sacrifice for the environment as the criterion variable. The predictor variables were the conditions and self-concordance scores. I dummy-coded the inspiration and non-inspiration control conditions and centered the continuous moderator variable to reduce multicollinearity. These were entered in Step 1 of the hierarchical regression, and the interaction term was entered in Step 2. The interaction between condition and self-concordance was not significant ($\beta = .143$, $SE = .344$, $t = 1.364$, $p = .174$), so no further analyses were conducted using self-concordance as a predictor variable.

Though not part of my original hypothesis, a person's level of commitment to the environment could be viewed as a measure of self-concordant values. Thus, I ran another hierarchical regression with willingness to sacrifice for the environment as the criterion variable. The predictor variables were condition and commitment to the environment scores. I dummy-coded the conditions and centered the continuous moderator variable to reduce multicollinearity. The interaction between condition and commitment to the environment was significant, $\beta = .149$, $SE = .567$, $t = 1.907$, $p = .058$. An examination of simple slopes revealed that in the inspiration condition, greater commitment to the environment was related to significantly greater willingness to sacrifice for the environment, $\beta = .852$, $SE = .339$, $t = 14.559$, $p < .001$. In the non-inspiration control condition, greater commitment to the environment was also related to significantly greater willingness to sacrifice for the environment, $\beta = .666$, $SE = .454$, $t = 8.504$, $p < .001$. However, pairwise comparisons (analyzed at 1 SD above and below the mean)

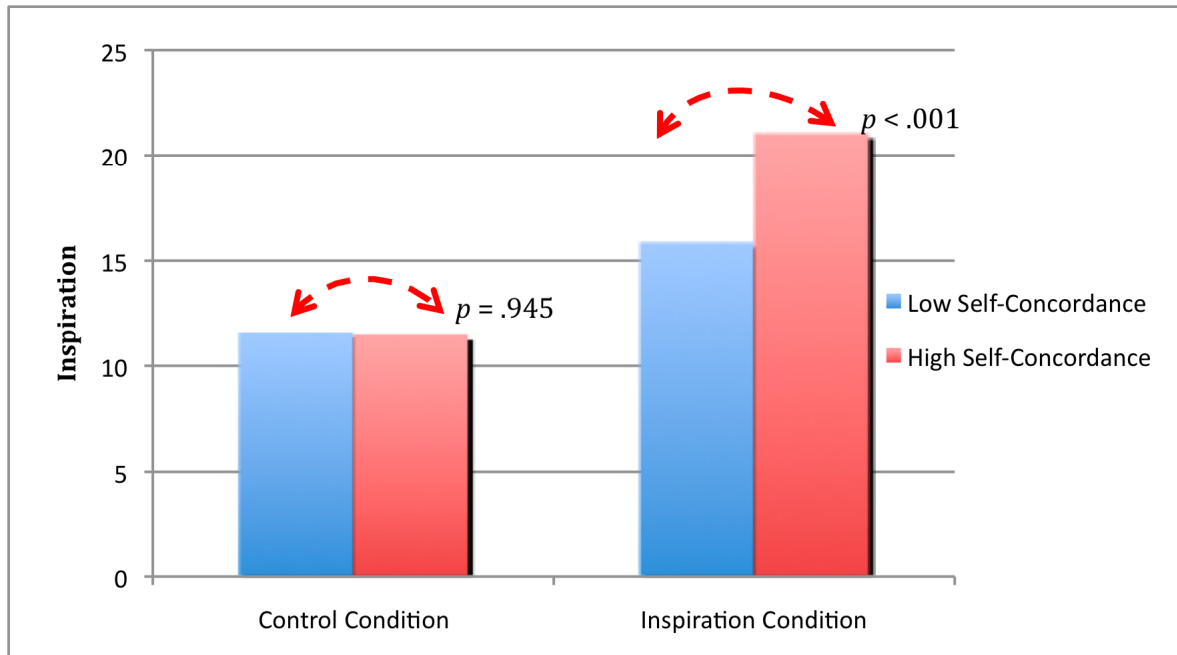


Figure 5. Graph of Simple Slopes Analysis of Condition and Self-Concordance on Inspiration.

revealed that whereas low-commitment individuals did not report significantly different levels of willingness to sacrifice between the non-inspiration control and inspiration conditions, $\beta = .03$, $SE = 1.307$, $t = .435$, $p = .664$, high-commitment individuals reported greater willingness to sacrifice in the inspiration condition than they did in the non-inspiration control, $\beta = .216$, $SE = 1.1283$, $t = 3.221$, $p = .002$ (see Figure 6). Thus, priming inspiration resulted in significantly greater willingness to sacrifice for the environment for those high in commitment to the environment.

Finally, I tested whether state inspiration mediated the relationship between commitment to the environment and willingness to sacrifice for the environment using steps outlined by Barron and Kenny (1986). The data file was split in order to examine the inspiration condition apart from the non-inspiration control condition. In Step 1, the relationship between commitment to the environment (initial predictor variable) and willingness to sacrifice for the environment (criterion variable) was significant, $\beta = 4.94$, $SE = .322$, $t = 15.34$, $p < .001$. In Step 2, the relationship between commitment to the environment and state inspiration (mediating variable) was also significant, $\beta = 1.87$, $SE = .346$, $t = 5.39$, $p < .001$. In Step 3, the inclusion of state inspiration in predicting willingness to sacrifice for the environment, $\beta = .32$, $SE = .09$, $t = 3.38$, $p = .001$, marginally reduced the effect of the commitment to the environment in predicting willingness to sacrifice, Sobel $z = 2.87$, $p = .004$, though the effect of commitment to the environment remained significant, $\beta = .435$, $SE = .35$, $t = 12.4$, $p < .001$. Thus, state inspiration partially mediated the effect of commitment to the environment on participants' willingness to sacrifice for the environment in the inspiration condition.

To test whether participants in the inspiration condition with high self-concordance would be more willing to take volunteering information, I conducted a logistic regression with

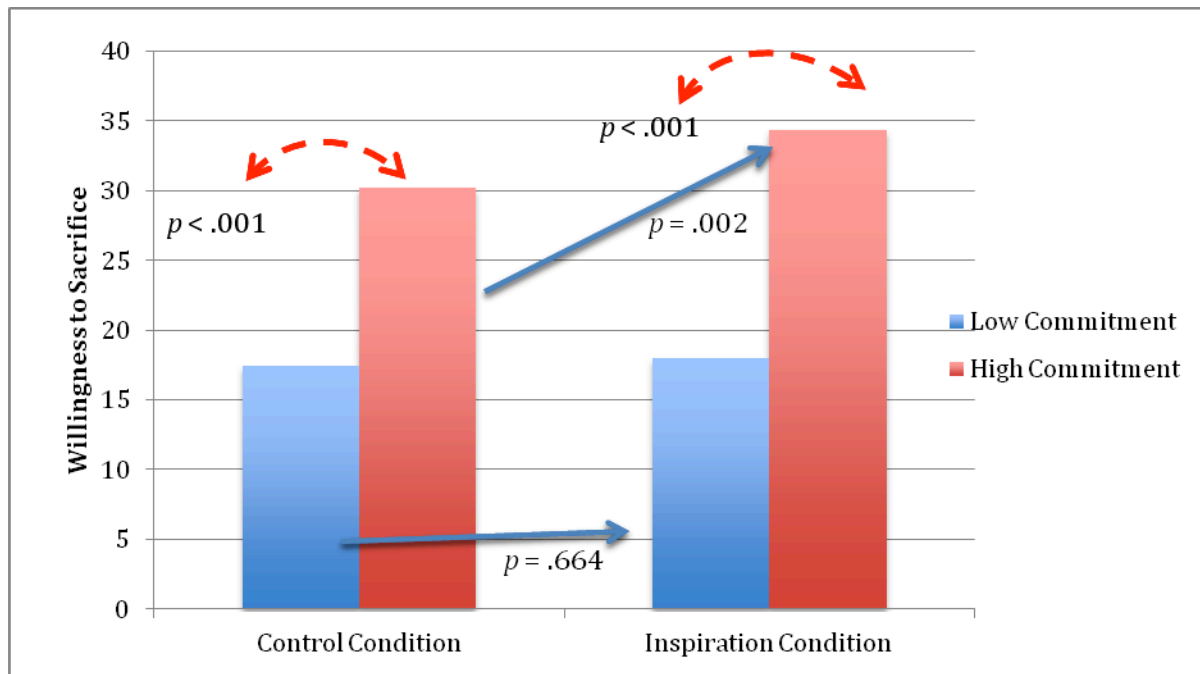


Figure 6. Graph of Simple Slopes Analysis and Pairwise Comparisons of Condition and Commitment to the Environment on Willingness to Sacrifice for the Environment.

self-concordance as the independent variable and taking information as a dichotomous (yes versus no) dependent variable. The data file was split in order to examine the inspiration condition apart from the non-inspiration control condition. The overall model was non-significant, $\chi^2(1, N = 91) = .261, p = .609$, indicating self-concordance did not distinguish between participants' willingness to take volunteering information.

Given the results that commitment to the environment predicted willingness to sacrifice for the environment, I conducted a logistic regression to test whether commitment scores would predict if participants would take volunteering information. The overall model was statistically significant, $\chi^2(1, N = 91) = 5.294, p = .021$, indicating commitment to the environment predicted whether participants would take volunteering information. Commitment to the environment explained 5.7% (Cox and Snell R Square) and 9.1% (Nagelkerke R Square) of the variance, and the odds ratio was 1.45. This indicated that the higher participants were in commitment to the environment, the more likely they were to take volunteering information.

Finally, I tested whether inspiration mediated the relationship between commitment to the environment and the taking of volunteering information again using steps outlined by Barron and Kenny (1986) adapted for dichotomous outcome variables. First, the relationship between commitment to the environment (initial predictor variable) and taking of volunteering information (criterion variable) was significant, $\beta = .37, SE = .171, Wald = 4.68, p = .031$. Second, the relationship between commitment to the environment and inspiration (mediating variable) was also significant, $\beta = 1.87, SE = .35, t = 5.39, p < .001$. Finally, the inclusion of inspiration in predicting the taking of volunteering information, $\beta = .029, SE = .05, Wald = .33, p = .57$, marginally reduced the effect of commitment to the environment in predicting the taking

of volunteering information, $\beta = .326$, $SE = .187$, $Wald = 3.04$, $p = .081$, but not to a significant degree, Sobel $z = .58$, $p = .564$, so mediation was not found.

The last aspect of Hypothesis 4 was that self-concordance would predict whether participants would email the given email address for volunteering opportunities. Actually emailing for volunteering opportunities was considered a second behavioral measure rather than just a behavioral intention. Out of 173 participants, only one participant emailed for information, so no analyses were conducted. In sum, Hypothesis 4 was not supported using self-concordance as a predictor variable, but commitment to the environment was a significant predictor of behavioral intentions and one behavioral outcome.

Discussion of Study 2

The purpose of Study 2 was to replicate some of the findings from Study 1 and to test the remaining component of the Value-Congruent Model of Inspiration and proposed definition. Specifically, I investigated whether the relationships between inspiration, self-transcending emotions, and helping attitudes would be similar to that of Study 1. I also investigated whether the value-specificity hypothesis would be replicated in Study 2 by using a different predictor variable measuring internalized values (Self-concordance scores). Finally, I tested whether the experience of value-congruent inspiration would predict value-congruent intentions and behavior.

Consistent with the results from Study 1, state inspiration correlated positively with state levels of admiration, awe, and elevation. Moreover, in Study 1, inspiration was correlated the strongest with elevation in the nature inspiration condition. This finding was replicated in Study 2, indicating the same inspirational content may produce the same core emotion related to inspiration on a consistent basis across different samples of people.

Contrary to Hypothesis 2, participants in the inspiration condition did not differ from those in the non-inspiration control condition on helping attitudes post-manipulation. However, this finding was consistent with the results from Study 1. The Helping Attitudes Scale is a general measure of prosocial behavior related to helping others in need, so the lack of differences between conditions makes sense given the content of the inspiration condition had to do with preserving the environment. This indicates inspiration does not necessarily relate to general prosocial attitudes, but it may relate to more specific content domains depending on one's internalized values. This would be more consistent with the value-specificity hypothesis, which states that inspiration is experienced when the content of a stimulus is value-congruent, and was supported in the subsequent analysis.

Consistent with Study 1, participants' internalized values predicted whether they experienced inspiration in the inspiration condition. In the inspiration condition, greater self-concordance was related to significantly greater state inspiration. This result replicated and strengthened the results of Study 1 by showing state inspiration could be predicted by a different measure of one's internalized or congruent values.

Results from Study 2 did not support the Value-Congruent Model and definition of inspiration when using the self-concordance variable to predict behavioral intentions and behavior. Self-concordance scores did not predict one's willingness to sacrifice for the environment nor whether participants took volunteering information. However, when using commitment to the environment to operationalize internalized values, greater commitment to the environment predicted greater willingness to sacrifice for the environment in the inspiration condition, which was partially mediated by state inspiration. Additionally, commitment to the

environment predicted whether participants would take volunteering information in the inspiration condition, but this finding was not mediated by inspiration.

General Discussion

In the present dissertation, I argued that more research is needed to understand the nature of inspiration and its mechanisms of influence. Specifically, I suggested that in order to advance the study of inspiration, the following areas needed to be addressed: (a) inspiration needed to be contextualized within a unifying, theoretical framework from which theoretically grounded hypotheses can be generated for future studies; (b) its emotional correlates needed to be empirically investigated, and it must be meaningfully distinguished from emotions that involve similar characteristics (i.e., elevation, admiration, awe); and (c) a theoretically grounded definition of inspiration that accounts for its emotional component needed to be established and empirically tested to further validate its unique influence on human motivation and behavior. Toward this end, I proposed a theoretical model and definition of inspiration drawing upon literature from self-transcendent/other-praising emotions such as admiration, awe, and elevation (Algoe & Haidt, 2009; Haidt, 2003b) and literature on positive motivation from self-determination theory (Deci & Ryan, 1985) and the self-concordance model of goal striving (Sheldon & Elliott, 1998, 1999).

In two studies, I tested my Value-Congruent Model of Inspiration and my proposed definition. Consistent with prior theorizing and research, trait inspiration was positively related to dispositions of spiritual transcendence, hope, and gratitude (Thrash & Elliott, 2003; Thrash et al., 2010a), and the current studies extending these findings by using alternative scales for measuring these traits that have shown evidence of internal reliability and validity. Consistent with my proposed definition of inspiration, state inspiration was strongly related to state levels of admiration, awe, and elevation. Although, inspiration had been postulated to relate to these feeling states in prior research (Algoe & Haidt, 2009; Haidt & Morris, 2009; Keltner & Haidt,

2003; Landis et al., 2009; Ortony, Clore, & Collings, 1988; Thrash & Elliott, 2003), only a relationship between inspiration and awe had been empirically established (Thrash et al., 2010b). The current findings revealed state inspiration to be highly related to feelings of admiration, awe, and elevation, but findings provided initial evidence that inspiration is also reasonably distinct from these emotions. This suggests that the experience of admiration, awe, and elevation are core components of experiencing inspiration, but that inspiration cannot be reduced solely to these emotional components, supporting my proposed definition.

In the present studies, state inspiration was inconsistently related to a general measure of prosocial attitudes depending on the content of the manipulation. When viewing material related to artistic beauty, participants in the artistic inspiration condition reported greater helping attitudes than those in the non-inspiration control condition. However, neither study showed there to be a significant difference on helping attitudes between the inspiration condition and non-inspiration control when participants were viewing material related to natural beauty. Although this was contrary to my initial hypothesis, I propose this finding is more supportive of the value-specificity hypothesis. This suggests inspiration does not necessarily relate to general prosocial behavior; rather, it relates to specific content domains when those domains are aligned with one's enduring interests and values.

Across both studies, individuals experienced greater inspiration when the stimulus content was aligned with their self-reported levels of engagement or concordance with that particular content domain. This is similar to prior research that found that people with a more internalized sense of moral-identity experience greater elevation in response to a morally elevating event (Aquino et al., 2010). The current findings show that inspiration is likewise experienced to a greater degree when the content of a particular stimulus is more congruent with

one's internalized values or interests. These results provide initial evidence to support the first components of the Value-Congruent Model of Inspiration. The findings also help to explain why inspiration is experienced and account for its experience across different domains by different people. The findings were consistent with two different measures of internalized values and interests across both studies.

The final component of my theoretical model and definition of inspiration stated the experience of value-congruent inspiration would motivate a desire to enact value-congruent behavior. This was tested in Study 2 with different measures for behavioral intentions and outcomes. The inconsistent findings when it came to predicting behavioral intentions and volunteering behavior may have been the result of measurement rather than an indication the model itself is flawed. How internalized values are operationalized and measured will determine how well they will predict subsequent actions. Adapting a measure of self-concordance from Sheldon and Elliott (1999) to measure identified and intrinsic motivation for enacting behaviors to preserve the environment did not yield the predicted results. The results when using participants' commitment to the environment as a measure of internalized values were promising; however, commitment to the environment may not be a valid way to operationalize one's internalized values. Commitment to the environment has been shown to predict willingness to sacrifice for the environment and reports of ecological behavior even when controlling for such variables as inclusion of nature in the self, environmental identity, and one's connectedness to nature (Davis et al., 2011). The measure may thus account for too much variance when predicting environmental intentions and behaviors, which may explain why the mediating role of inspiration was inconsistent. Given the lack of a valid and reliable measure of

internalized values for environmental causes, further research is needed before more conclusive results can be drawn.

Limitations and Future Research

The present studies had several limitations. First, the samples in both studies were comprised only of college students. It is important to examine the experience of inspiration in other populations. Future research is needed to see how inspiration is experienced in different cultures and across the lifespan. Additionally, the behavioral outcome of volunteering may have been too great a commitment for the present sample affected by the timing of the study to yield the predicted results. The sample was drawn from college students during the spring semester, which may have impacted their desire or willingness to volunteer. Future research will need to carefully account for potential confounds regarding time, means, and other demands that might impact one's willingness to enact value-congruent behavior having experienced inspiration. Second, the present studies only looked at a limited number of feelings thought to relate to inspiration. Future research could examine other potential feeling states that might also play a role in the experience of inspiration. Finally, findings in the present studies may have been limited by measurement challenges. Future research is needed to establish a reliable way to measure internalized values and interests across different domains to establish more conclusive support for the current model and conceptualization of inspiration.

Practical Implications

The current studies potentially have several practical applications in the future. First, in light of the current findings, inspiration may serve as an indicator of internalized values and interests. For individuals struggling with existential concerns, exploring their experiences of inspiration may help to clarify their sense of identity and meaning. Second, inspirational

experiences may serve as a guidepost for establishing goals and enacting behaviors that are more aligned with one's enduring interests and values. Pursuing goals that are more congruent with intrinsic motivation in turn can lead to better outcomes and enhanced well-being (Sheldon & Elliott, 1999). Finally, given inspiration's potential role in various creative endeavors and humanitarian acts, its experience may help to promote the flourishing of individuals and society. A greater understanding of how and why people experience inspiration could aid in the development of interventions to promote its experience more frequently.

Conclusion

There has been little empirical investigation of inspiration as a psychological construct. The present dissertation has expanded our understanding of its components and influence on behavior. Moreover, it has provided a theoretical model and definition of inspiration from which further hypotheses and studies can be generated for future research. We now have initial evidence that inspiration is highly related to self-transcending emotions that are felt when we experience something that is congruent with our internalized values and interests. How exactly the experience of inspiration and other mitigating factors influence behavior remain the subject of future research.

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Appendix A

Measures Used in Study 1

ASPIRES

ASSESSMENT OF SPIRITUALITY AND RELIGIOUS SENTIMENTS SELF-REPORT FORM

Ralph L. Piedmont, Ph.D.

Name: _____

Date: _____

GENDER (Please circle): Male Female Age: _____

RACE: ☐ Arabic ☐ Asian ☐ Black ☐ Caucasian ☐ Hispanic ☐ Other

Religious Affiliation:

- | | | | |
|--|---|--|------------------------------------|
| <input type="checkbox"/> Catholic | <input type="checkbox"/> Lutheran | <input type="checkbox"/> Methodist | <input type="checkbox"/> Episcopal |
| <input type="checkbox"/> Unitarian | <input type="checkbox"/> Baptist | <input type="checkbox"/> Presbyterian | <input type="checkbox"/> Mormon |
| <input type="checkbox"/> Other Christian | <input type="checkbox"/> Jewish | <input type="checkbox"/> Muslim | <input type="checkbox"/> Hindu |
| <input type="checkbox"/> Buddhist | <input type="checkbox"/> Atheist/Agnostic | <input type="checkbox"/> Other Faith Tradition | |

Instructions: This questionnaire will ask you about various perceptions you hold about your view of the world and your place in it. Answer each question on the scale provided by checking the box that best expresses your feelings (e.g., ✓ or ✕). If you are not sure of your answer or believe that the question is not relevant to you, then mark the "Neutral" category.

Please work quickly, do not spend too much time thinking about your responses to any single item. Usually, your first answer is your best response, so go with your first reaction to the item.

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Section I.

1. How often do you read the Bible/Torah/Koran/Geeta?

<input type="checkbox"/> Never	<input type="checkbox"/> About once a month	<input type="checkbox"/> Several times a week
<input type="checkbox"/> About once or twice a year	<input type="checkbox"/> 2 or 3 times a month	
<input type="checkbox"/> Several times a year	<input type="checkbox"/> Nearly every week	
2. How often do you read religious literature other than the Bible/Torah/Koran/Geeta?

<input type="checkbox"/> Never	<input type="checkbox"/> About once a month	<input type="checkbox"/> Several times a week
<input type="checkbox"/> About once or twice a year	<input type="checkbox"/> 2 or 3 times a month	
<input type="checkbox"/> Several times a year	<input type="checkbox"/> Nearly every week	
3. How often do you pray?

<input type="checkbox"/> Never	<input type="checkbox"/> About once a month	<input type="checkbox"/> Several times a week
<input type="checkbox"/> About once or twice a year	<input type="checkbox"/> 2 or 3 times a month	
<input type="checkbox"/> Several times a year	<input type="checkbox"/> Nearly every week	
4. How frequently do you attend religious services?

<input type="checkbox"/> Never	<input type="checkbox"/> Rarely	<input type="checkbox"/> Occasionally	<input type="checkbox"/> Often	<input type="checkbox"/> Quite Often
--------------------------------	---------------------------------	---------------------------------------	--------------------------------	--------------------------------------
5. To what extent do you have a personal, unique, close relationship with God?

<input type="checkbox"/> Not at all	<input type="checkbox"/> Slight	<input type="checkbox"/> Moderate	<input type="checkbox"/> Strong	<input type="checkbox"/> Very Strong
-------------------------------------	---------------------------------	-----------------------------------	---------------------------------	--------------------------------------
6. Do you have experiences where you feel a union with God and gain spiritual truth?

<input type="checkbox"/> Never	<input type="checkbox"/> Rarely	<input type="checkbox"/> Occasionally	<input type="checkbox"/> Often	<input type="checkbox"/> Quite Often
--------------------------------	---------------------------------	---------------------------------------	--------------------------------	--------------------------------------
7. How important to you are your religious beliefs?

<input type="checkbox"/> Extremely important	<input type="checkbox"/> Very important	<input type="checkbox"/> Fairly important
<input type="checkbox"/> Somewhat unimportant	<input type="checkbox"/> Fairly unimportant	<input type="checkbox"/> Not at all important
8. Over the past 12 months, have your religious interests and involvements...

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7
Increased Stayed the same Decreased
9. I feel that God is punishing me.

<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly Agree
--	-----------------------------------	----------------------------------	--------------------------------	---
10. I feel abandoned by God.

<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly Agree
--	-----------------------------------	----------------------------------	--------------------------------	---
11. I feel isolated from others in my faith group.

<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly Agree
--	-----------------------------------	----------------------------------	--------------------------------	---
12. I find myself unable, or unwilling, to involve God in the decisions I make about my life.

<input type="checkbox"/> Strongly disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Neutral	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly Agree
--	-----------------------------------	----------------------------------	--------------------------------	---

Section II.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. I have not experienced deep fulfillment and bliss through my prayers and/or meditations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I do not feel a connection to some larger Being or Reality.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I do not believe that on some level my life is intimately tied to all of humankind.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I meditate and/or pray so that I can reach a higher spiritual level.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. All life is interconnected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. There is an order to the universe that transcends human thinking.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Death does stop one's feelings of emotional closeness to another.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. In the quiet of my prayers and /or meditations, I find a sense of wholeness.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I have done things in my life because I believed it would please a parent, relative, or friend that had died.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Although dead, memories and thoughts of some of my relatives continue to influence my current life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Spirituality is not a central part of my life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I find inner strength and/or peace from my prayers and/or meditations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Although there is good and bad in people, I believe that humanity as a whole is basically bad.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I do not have any strong emotional ties to someone who has died.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. There is no higher plane of consciousness or spirituality that binds all people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Although individual people may be difficult, I feel an emotional bond with all of humanity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I meditate and/or pray so that I can grow as a person.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Prayer and/or meditation does not hold much appeal to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. My prayers and/or meditations provide me with a sense of emotional support.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I feel that on a higher level all of us share a common bond.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I want to grow closer to the God of my understanding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. The praise of others gives deep satisfaction to my accomplishments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I am not concerned about the expectations that loved ones have of me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Engagement with Beauty Scale

In regard to all responses below: Keep in mind that we are only asking about your *experience with perceiving and feeling something as beautiful*. We are **not** asking if you like something; we are **not** asking if you think something is important; we only ask if you **feel it as beautiful**.

Mark each statement below with a number between 1 and 7:

1 = very unlike me

2 = unlike me

3=a little unlike me

4 = neutral

5 = a little like me

6 = like me

7 = very much like me

Statements 1-4 below refer to experiences with nature and the physical world, including, mountains, rocks rivers, lakes, oceans, deserts, plants, flowers, trees, animals, etc. (but NOT the human body).

____ 1. I **notice beauty** in one or more aspects of nature.

____ 2. When **perceiving beauty** in nature I **feel** changes in my body, such as a lump in my throat, an expansion in my chest, faster heart beat, or other bodily responses.

____ 3. When **perceiving beauty** in nature I **feel** emotional, it “moves me,” such as feeling a sense of awe, or wonder or excitement or admiration or upliftment.

____ 4. When **perceiving beauty** in nature I **feel** something like a spiritual experience, perhaps a sense of oneness, or being united with the universe, or a love of the entire world.

Statements 5-8 below refer to experiences with art, such as paintings, sculpture, music, dance, architecture, poetry, novels, literature, etc.

____ 5. I **notice beauty** in art or human made objects.

____ 6. When **perceiving beauty** in a work of art I **feel** changes in my body, such as a lump in my throat, an expansion in my chest, faster heart beat, or other bodily responses.

____ 7. When **perceiving beauty** in a work of art I **feel** emotional, it “moves me,” such as feeling a sense of awe, or wonder or excitement or admiration or upliftment.

____ 8. When **perceiving beauty** in a work of art I **feel** something like a spiritual experience, perhaps a sense of oneness, or being united with the universe, or a love of the entire world.

Statements 9-14 below refer to experiences with humans, in which you perceive (or hear about) some person demonstrating an *impressive act of charity or loyalty or kindness or compassion or forgiveness or sacrifice for others or sincere service to others*. We refer to these as acts of moral

beauty.

____ 9. I **notice moral beauty** in human beings.

____ 10. When **perceiving** an act of **moral beauty** I **feel** changes in my body, such as a lump in my throat, an expansion in my chest, faster heart beat, or other bodily responses.

____ 11. When **perceiving** an act of **moral beauty** I **feel** emotional, it “moves me,” such as feeling a sense of awe, or wonder or excitement or admiration or upliftment.

____ 12. When **perceiving** an act of **moral beauty** I **feel** something like a spiritual experience, perhaps a sense of oneness, or being united with the universe, or a love of the entire world.

____ 13. When **perceiving** an act of **moral beauty** I find that I desire to become a better person.

____ 14. When **perceiving** an act of **moral beauty** I find that I desire to do good deeds and increase my service to others.

The Gratitude Questionnaire

INSTRUCTIONS: Using the scale below as a guide, write a number beside each statement to indicate how much you agree with it.

1	2	3	4	5	6	7
Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree

_____ 1. I have so much in life to be thankful for.

_____ 2. If I had to list everything that I felt grateful for, it would be a very long list.

_____ 3. When I look at the world, I don't see much to be grateful for.

_____ 4. I am grateful to a wide variety of people.

_____ 5. As I get older, I find myself more able to appreciate the people, events, and situations that have been part of my life history.

_____ 6. Long amounts of time can go by before I feel grateful to something or someone.

Herth Hope Index

Listed below are a number of statements. Write a number beside each statement to indicate how much you agree with that statement right now.

1	2	3	4
Strongly	Disagree	Agree	Strongly
Disagree			Agree

- _____ 1. I have a positive outlook towards life.
- _____ 2. I have short and/or long-range goals.
- _____ 3. I feel all alone.
- _____ 4. I can see possibilities in the midst of difficulties.
- _____ 5. I have a faith that gives me comfort.
- _____ 6. I feel scared about my future.
- _____ 7. I can recall happy/joyful times.
- _____ 8. I have deep inner strength.
- _____ 9. I am able to give and receive caring/love.
- _____ 10. I have a sense of direction.
- _____ 11. I believe that each day has potential.
- _____ 12. I feel my life has value and worth.

Inspiration Scale

Please rate the following items with the appropriate scale. The four frequency items are rated on a scale from 1 (never) to 7 (very often).

The four intensity items are rated on a scale from 1 (not at all) to 7 (very deeply or strongly).

1. I experience inspiration.

_____ How often does this happen? Frequency

_____ How deeply or strongly (in general)? Intensity

2. Something I encounter or experience inspires me.

_____ How often does this happen? Frequency

_____ How deeply or strongly (in general)? Intensity

3. I am inspired to do something.

_____ How often does this happen? Frequency

_____ How deeply or strongly (in general)? Intensity

4. I feel inspired.

_____ How often does this happen? Frequency

_____ How deeply or strongly (in general)? Intensity

Admiration

Below is a series of statements which describe how you might feel about the acts you just witnessed. Please indicate the number which corresponds with how strongly you agree with the statement:

- _____ 1. I feel this person has the qualities of a hero.
- _____ 2. I admire this person's abilities and attributes.
- _____ 3. I would like to be more like this person.
- _____ 4. I feel he/she is truly an amazing individual.
- _____ 5. I feel this is someone I could look up to.
- _____ 6. I have a great deal of respect for this individual.

Awe

Below is a series of statements which describe how you might feel at the current moment. Please indicate the number which corresponds with how strongly you agree with the statement:

- 1= Strongly Disagree.
- 2= Disagree.
- 3= Neither Agree or Disagree.
- 4= Agree.
- 5= Strongly Agree.

- _____ 1. I am caught up in the wonderment of life.
- _____ 2. I feel that it is a miracle to be alive.
- _____ 3. I feel a positive, emotional connection to nature.
- _____ 4. I feel like a child who is awestruck.
- _____ 5. I feel a sense of wonder and amazement.
- _____ 6. I feel a sense of being moved or uplifted.

Items 1-4 were adapted from the Appreciation Scale (Adler & Fagley, 2005)

Elevation

- _____ 1. I feel “choked up” (a feeling in my throat)
- _____ 2. I feel tingles or chills or goose bumps.
- _____ 3. I feel like I want to do something good.
- _____ 4. I got tears in my eyes during this experience.
- _____ 5. I feel happy.
- _____ 6. I feel a warm or glowing feeling in my chest.
- _____ 7. This makes me feel that I am somehow “lifted up” or “nobler” myself.
- _____ 8. This makes me want to tell the story to other people.
- _____ 9. This makes me want to thank or reward the person who did the good deed.
- _____ 10. This makes me feel more open and loving towards people in general.

Items were adapted from The Elevation Scale developed by Haidt (personal communication, April 28, 2003)

The Helping Attitude Scale

INSTRUCTIONS: This instrument is designed to measure your feelings, beliefs, and behaviors concerning your interactions with others. It is not a test, so there are no right or wrong answers. Please answer the questions as honestly as possible according to how you feel this very moment and not how you might usually feel. Using the scale below, indicate your level of agreement or disagreement in the space, which is next to each statement.

1	2	3	4	5
Strongly	Disagree	Undecided	Agree	Strongly
Disagree				agree

As you read the questions, think of the following words at the beginning of each one: At this moment,

- _____ 1. I feel helping others is usually a waste of time.
- _____ 2. I would enjoy aiding others who are in need.
- _____ 3. If possible, I would return lost money to the rightful owner.
- _____ 4. I feel helping friends and family would be one of the great joys in life.
- _____ 5. I would avoid aiding someone in a medical emergency if I could.
- _____ 6. It would feel wonderful to assist others in need.
- _____ 7. I feel volunteering to help someone would be very rewarding.
- _____ 8. I would dislike giving directions to strangers who are lost.
- _____ 9. Doing volunteer work would make me feel happy.
- _____ 10. I would donate time or money to charities every month.
- _____ 11. Unless they are part of my family, I feel helping the elderly isn't my responsibility.
- _____ 12. I feel children should be taught about the importance of helping others.
- _____ 13. I plan to donate my organs when I die, with the hope that they will help someone else live.
- _____ 14. I would try to offer my help with any activities my community or school groups are carrying out.

- _____ 15. I would feel at peace with myself if I helped others.
- _____ 16. If the person in front of me in the checkout line at a store was a few cents short, I would pay the difference.
- _____ 17. I would feel proud if I knew that my generosity had benefited a needy person.
- _____ 18. I feel helping people does more harm than good because they come to rely on others and not themselves.
- _____ 19. I would not contribute money to a worthy cause.
- _____ **20. I feel giving aid to the poor is the right thing to do.**

PANAS

DIRECTIONS: This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way right now, that is, at the present moment. Use the following scale to record your answers.

- 1 = very slightly or not at all
- 2 = a little
- 3 = moderately
- 4 = quite a bit
- 5 = extremely

- 1. ____ interested
- 2. ____ distressed
- 3. ____ excited
- 4. ____ upset
- 5. ____ strong
- 6. ____ guilty
- 7. ____ scared
- 8. ____ hostile
- 9. ____ enthusiastic
- 10. ____ proud
- 11. ____ irritable
- 12. ____ alert
- 13. ____ ashamed
- 14. ____ inspired
- 15. ____ nervous
- 16. ____ determined
- 17. ____ attentive
- 18. ____ jittery
- 19. ____ active
- 20. ____ afraid**

Appendix B

Additional Measures Used in Study 2

CTE

To what extent does each statement describe your current attitudes about your relationship with the natural environment? Please use the following scale to record your answers.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree			Agree		
At All			Somewhat			Completely		

- _____ 1. I am interested in strengthening my connection to the environment in the future.
- _____ 2. I feel strongly linked to the environment.
- _____ 3. When I make plans for myself, I take into account how my decisions may affect the environment.
- _____ 4. It seems to me that humans and the environment are interdependent (e.g., they affect one another).
- _____ 5. It makes me feel good when something happens that benefits the environment.
- _____ 6. Feeling a connection with the environment is important to me.
- _____ 7. I expect that I will always feel a strong connection with the environment.
- _____ 8. I believe that the well-being of the natural environment can affect my own well-being.
- _____ 9. It is unlikely that I'll feel a connection to the environment in the future.
- _____ 10. I feel very attached to the natural environment.
- _____ 11. I feel committed to keeping the best interests of the environment in mind.

Motivations

People often have different motivations for doing things that would help others or the world around them. For instance, in some circumstances individuals might do something to help another person because they have been told that to be a good person they should always help those in need and to not help would leave them feeling guilty or anxious. However, in other circumstances a person may help someone else because they really enjoy helping others and believe it is important to do so.

For this questionnaire, we are interested in learning about people's motivations to engage in activities that would benefit the natural environment. This could include behaviors from simply using the VCU recycling bins to more involved activities such as volunteering your time or money to different environmental causes.

Take a moment to think of a recent time you did something that could be considered environmentally friendly (i.e., recycling, volunteering to pick up trash, planting a tree, etc.), and think of potential reasons why you were motivated to do this. For the following four items, please circle the number below each statement that most accurately captures your motivation for engaging in environmentally-friendly behaviors.

1. I do things to help the environment because I would feel ashamed, guilty, or anxious if I didn't.

1	2	3	4	5	6	7	8	9
Not at all for this reason			Somewhat for this reason			Completely for this reason		

2. I do things to help the environment because somebody else wants me to or because the situation demands it.

1	2	3	4	5	6	7	8	9
Not at all for this reason			Somewhat for this reason			Completely for this reason		

3. I do things to help the environment because I really believe it's an important goal to have.

1	2	3	4	5	6	7	8	9
Not at all for this reason			Somewhat for this reason			Completely for this reason		

4. I do things to help the environment because of the fun and enjoyment it provides me.

1	2	3	4	5	6	7	8	9
Not at all for this reason			Somewhat for this reason			Completely for this reason		

WTS

To what extent does each statement describe your current attitudes? Please use the following scale to record your answers.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree			Agree		
At All			Somewhat			Completely		

- _____ 1. I am willing to give things up that I like doing if they harm the natural environment.
- _____ 2. I am willing to take on responsibilities that will help conserve the natural environment.
- _____ 3. I am willing to do things for the environment, even if I'm not thanked for my efforts.
- _____ 4. Even when it is inconvenient to me, I am willing to do what I think is best for the environment.
- _____ 5. I am willing to go out of my way to do what is best for the environment.

Behavioral Measure

This concludes the study. You are now free to turn in your information and leave. However, because the content of this study deals with conservation of our natural resources, we wanted to give you information on one way you can get involved to help the environment on a local level for those of you who might be interested.

Please be aware that you are in no way obligated to do so, and you should feel no pressure to continue. However, if you are interested in learning more, read the following page. You are also free to detach it and take it with you.

Become a Friend!

The James River Park System, a unique part of Richmond's Department of Parks, Recreation and Community Facilities. It includes most of the fall line of the James River. Rocks, rapids, meadows, and forests make for an area of unspoiled natural beauty -- a little bit of wilderness in the heart of the city.

For some of us, walking the trails of the James River Park is a once a summer treat. For others unloading kayaks from the tops of cars and paddling in the river is a weekly ritual. For all of us the James River and its miles of park shoreline and islands within a major metropolitan area provide a life-affirming connection to the natural world. Chronically underfunded and understaffed, the James River Park System relies on individual volunteers and groups such as the Friends of James River Park to keep it scenic and special.

In turn, FOJRP relies on memberships and donations to supplement tight park budgets to make key educational and enrichment activities available, fund park improvements, and protect the JRPS for future generations.

The Friends of James River Park is an all-volunteer 501(c)(3) organization created by a dedicated group of citizens in 1999. Our mission is to provide an ongoing source of citizen support for the conservation, enhancement, and enjoyment of the 550-acre James River Park System and its natural and historic environments.

Here's how you can help:

Become a member: For as little as \$15 a year (or \$5 for students), you can become a member of the Friends of James River Park (FOJRP) and receive our iconic salamander bumper sticker. And our tax-deductible thanks!

Volunteer: Several times a year, FOJRP organizes volunteer activities such as river clean-up, planting, etc. The James River Park System is a great place for students to gain an appreciation for our natural environment while racking up community service hours. Whether it's cleaning up trash on the shoreline, painting structures in the park, removing graffiti, maintaining trails, clearing invasive species, we'll point you in the right direction so you can pitch in.

If you are interested in learning more, please detach this page and take this information with you. If you would like to become a member of FOJRP or would like to volunteer for a future activity, please email us at friendsofjamesriverpark@gmail.com. We hope to hear from you soon!

Vita

David Jefferson Jennings II was born on February 10, 1972, in Galveston, Texas. He is a United States citizen. He graduated from Colonial High School, Orlando, Florida in 1990. He received his Bachelor of Arts in Liberal Arts from Bryan College in 1994, where he graduated Summa Cum Laude. He received his Master of Arts in Counseling from Richmond Graduate University, Atlanta, Georgia, in 2003 and his Master of Science in Counseling Psychology from Virginia Commonwealth University, Richmond, Virginia, in 2010.